## College of Business

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## PURPOSE

The mission of the College of Business is to expand the knowledge of business and to educate men and women for managerial leadership through research activities and professional educational programs. These programs address issues of importance to future managers in a world characterized by demands for continuous improvements in quality; growing sophistication of information technology; globalized markets; racial, cultural, and gender diversity in the work force; and a demand for managers with practical, realistic skills.

Students have many opportunities to supplement their academic experiences. The college offers an honors program for academically talented students, an Academic Access Program to increase ethnic diversity of the student body, an international component to provide a variety of international opportunities, an internship program which provides related practical experience, and 18 cocurricular organizations to increase student interaction and learning.

The college is a member of the American Assembly of Collegiate Schools of Business (AACSB), the official accrediting organization in the field of business. The undergraduate and graduate programs and the School of Accountancy are accredited by this organization.

The college is host to a chapter of Beta Gamma Sigma, a national society that recognizes high academic achievement in AACSB-accredited schools. Selection to Beta Gamma Sigma is the highest scholastic honor a student in business can earn.

In addition to the regular degree curricula, other programs of study in the college are designed to meet special needs. Evening and continuing education courses are conducted for qualified persons who are regularly employed and who otherwise would be unable to enroll in college courses. Short courses and institutes on a noncredit basis are organized in cooperation with various business groups for the furtherance of in-service training of employed personnel.

The college works in partnership with the business community, and the board of the Dean's Council of 100 serves as a primary source of advice and counsel for the college. Through the various divisions of the L. William

Seidman Institute, the college reaches out to the business community through research and executive education.

## ORGANIZATION

The courses offered by the College of Business are organized into groups so that a related sequence may be established for the various subject fields. For administrative purposes, these fields are organized into the following academic units:

School of Accountancy
Department of Business
Administration
Department of Decision and
Information Systems
Department of Economics
Department of Finance
School of Health Administration and Policy
Department of Management
Department of Marketing

## ADMISSION

The Prebusiness Program. Each student admitted to the College of Business is designated as a prebusiness student. The student follows the freshman and sophomore sequence of courses listed in the curriculum outline. Students are required to follow the recommendations of an academic advisor in completing the prescribed background and skill courses in preparation for the subsequent professional program. The skill courses are shown below.

ACC 230 Uses of Accounting
Information I

ACC 240 Uses of Accounting Information II
CIS 200 Computers in Business N3 .... 3
ECN 111 Macroeconomic Principles $S B$ 3
ECN 112 Microeconomic Principles $S B$
ENG 101, 102 First-Year Composition ................. 6 or ENG 105 Advanced First-Year Composition (3)
MAT 119 Finite Mathematics N1 .......... 3
MAT 210 Brief Calculus N1 ................. 3
QBA 221 Statistical Analysis N2 .......... 3
Accountancy and Computer Information Systems majors should refer to their specific requirements on pages 229-230 and 233-234 which list variations in the skill courses.

Completion of lower-division requirements does not ensure acceptance to the upper-division professional pro-
gram. Prebusiness students are not allowed to register for 300 - and 400-level business courses.
The Professional Program. The junior and senior years constitute the professional program of the undergraduate curriculum. Admission to the professional program is competitive and limited by available resources. Admission is awarded to those applicants demonstrating the highest promise for professional success.

To be considered for admission to the professional program, students must obtain an application to the professional program in the Undergraduate Programs Office in the College of Business. This application contains complete information concerning academic qualifications for admission to the professional program.
Nonbusiness Students. A nonbusiness student is permitted to register for selected 300 - and 400 -level business courses only if, (1) at the time of registration, the student has junior standing (56 semester hours completed) and (2) the student has a minimum cumulative GPA of 2.50 at ASU and a minimum GPA of 2.50 for all business courses completed at ASU. Students who have 56 semester hours completed but have never attended ASU are given a one-semester period to register and to establish a GPA at ASU. Students must meet all prerequisites and course requirements as listed in the catalog.

Nonbusiness majors are limited to a maximum of 15 semester hours of selected upper-division business courses (excluding economics courses).
Minor. A Business minor is available to nonbusiness students with an interest in this area. To complete the minor, students must obtain the requirements from the Undergraduate Programs Office in the College of Business and complete the specified business courses with a grade of "C" or better. Courses used in a student's major may not be used toward the Business minor. Students are advised to consult an advisor in the college of their majors to ensure the proper selection of courses for the minor. The upper-division courses for the minor are restricted to students with 56 semester hours who are in good standing.

Nondegree Undergraduate and Graduate Students. A nondegree undergraduate or graduate student is permitted to enroll in selected 300- and 400-level business courses only during online registration and only if (1) the student has an ASU cumulative GPA of at least 2.50 and an ASU cumulative business GPA of at least 2.50 at the time of online registration or (2) the student has never attended ASU, in which case he or she is given a one-semester period to register during online registration and to establish a GPA at ASU. Students must meet all prerequisites and course requirements as listed in the catalog.

Nondegree undergraduate and graduate students are limited to a maximum of 15 semester hours of selected upperdivision business courses (excluding economics courses).

## ADVISING

The student should follow the sequence of courses in the curriculum outline below and the recommendations of the academic advisor in completing the prescribed background and skill courses in preparation for the subsequent professional program.

## Curriculum Outlines Prebusiness Program

## First Semester

ECN 111 Macroeconomic Principles SB ........................................... or ECN 112 Microeconomic Principles $S B$ (3)
ENG 101 First-Year Composition......... 3
MAT 119 Finite Mathematics N1 .......... 3
UNI 100 Academic Success at the University $\qquad$ (strongly recommended)
Laboratory science S1/S2

## Second Semester

COM 100 Introduction to Human Communication SB................ 3 or COM 230 Small Group Communication SB (3) or COM 259 Communication in Business and the Professions (3)
ECN 112 Microeconomic Principles $S B$. $\qquad$ or ECN 111 Macroeconomic Principles $S B$ (3)
ENG 102 First-Year Composition......... 3
MAT 210 Brief Calculus N1 .................. 3
Laboratory science S1/S2 . 4ECN 112 MicroeconomicPrinciples $S B$3Laboratory science SI/S2
Third Semester
ACC 230 Uses of Accounting Information I ..... 3
QBA 221 Statistical Analysis $N 2$ ..... 3
PGS or SOC course ..... 3
General Studies .....  7
Fourth Semester
ACC 240 Uses of Accounting Information II .... .....  3
CIS 200 Computers in Business N3 .... 3PGS or SOC course 3
General Studies .....  7
Total ..... 64

Accountancy and Computer Infor- mation Systems majors should refer to their specific course requirements on pages 229-230 and 233-234 which list course requirement variations.

Students are encouraged to have College Algebra (MAT 117) proficiency before registering in ECN 111 and 112. ECN 111 and 112 may be taken during the second and third semesters without any delay in the prebusiness program.

Students who are employed or who wish to take a reduced load may choose to complete the prebusiness program in five semesters. The following outline is recommended for these students.

## Optional Curriculum Outline

|  |  | First Semester |
| :---: | :---: | :---: |
| ECN | 111 | Macroeconomic |
|  |  | Principles SB ....................... 3 |
|  |  | or ECN 112 Microeconomic |
|  |  | Principles SB (3) |
| ENG | 101 | First-Year Composition........ 3 |
| MAT | 119 | Finite Mathematics N1 .......... 3 |
| UNI | 100 | Academic Success at the |
|  |  | University ........................... 3 |
|  |  | Second Semester |
| ECN | 112 | Microeconomic |
|  |  | Principles SB ...................... 3 |
|  |  | or ECN 111 Macroeconomic |
|  |  | Principles $S B$ (3) |
| ENG | 102 | First-Year Composition........ 3 |
| MAT | 210 | Brief Calculus N1 ................. 3 |
| Laboratory science S1/S2 ........................ 4 |  |  |
|  |  | Third Semester |
| ACC | 230 | Uses of Accounting |
|  |  | Information I ....................... 3 |
| COM | 100 | Introduction to Human |
|  |  | Communication SB................ 3 or COM 230 Small Group |
|  |  | Communication $S B$ (3) |
|  |  | or COM 259 Communication |
|  |  | in Business and the |
|  |  | Professions (3) |
| PGS or SOC course ............................... 3 |  |  |
| Laboratory science S1/S2 ........................ 4 |  |  |

## First Semester

Principles $S B$3or ECN 112 MicroeconomicPrinciples SB (3)

ENG 101 First-Year Composition......... 3
MAT 119 Finite Mathematics N1 .......... 3
UNI 100 Academic Success at the University 3
Principles $S B$3Principles $S B$ (3)$\begin{array}{lll}\text { ENG } & 102 & \text { First-Year Composition......... } 3 \\ \text { MAT } & 210 & \text { Brief Calculus N1 ................. } 3\end{array}$Laboratory science S1/S2 ........................... 4
Third Semester

ACC 230 Uses of Accounting Information I3Laboratory science $S 1 / S 2$4 pages 66-70. Omnibus courses are offered that are not listed in the catalog; see pages 44-45.


## Fifth Semester

QBA 221 Statistical Analysis N2 .......... 3
General Studies .......................................... 9
Total ......................................................... 62
Accountancy and Computer Information Systems majors should refer to their specific course requirements on pages 229-230 and 233-234 which list course requirement variations.

Professional Program. Students admitted to the professional program should select the necessary upper-division business courses to complete the major by consulting their departmental advising guide and faculty advisor.

Transfer Credit. Credit from other institutions is accepted subject to the following guidelines. Students planning to take their first two years of work at a community college or another four-year college should take only those courses in business and economics that are offered as freshman- or sophomore-level courses at any of the state-supported Arizona universities. These lower-division courses are numbered 100 through 299 at the Arizona universities. A maximum of 30 hours of business and economics courses from community colleges are accepted toward a bachelor's degree in business.

Students may transfer a maximum of nine semester hours of approved upperdivision business course work required for the business degree to ASU Main. Professional business courses taught in the junior or senior year in the state universities may not be completed at a two-year college for transfer credit in the business core or major. The introductory course in the legal, ethical, and regulatory issues in business is accepted as an exception to this policy, but only lower-division credit is granted. Such courses may be utilized in the free elective category subject to the 30-hour limitation. Courses taught as vocational or career classes at the community colleges that are not taught in the colleges of business at any one of the state universities are not accepted for credit toward a bachelor's degree. Courses taught in the upper-division
business core at the state universities must be completed at the degree-granting institution unless transferred from an accredited four-year school. Normally, upper-division transfer credits are accepted only from AACSB-accredited schools. To be accepted for credit as part of the professional program in business, all courses transferred from other institutions must carry prerequisites similar to those of the courses they are replacing at ASU.

The following general pattern of courses is recommended for students completing their first two years of work in an Arizona community college who plan to transfer to ASU without the loss of credit:

Business Courses..................................... 30
Uses of Accounting Information I and II (business core) (6) Business communication (3)
Computers in business (business core) (3)
Economics (social and behavioral sciences) (6)
Legal, ethical, and regulatory issues in business (business core) (3)
Quantitative methods in business (numeracy General Studies) (3)
Statistical analysis (numeracy General Studies) (3)
Lower-division business courses (electives) (3)
General Studies and English proficiency......................... 34
Communication
English
Global awareness
Humanities and fine arts
Laboratory science
Mathematics
Social and behavioral sciences
Total
64

Students should consult with an academic advisor in the Undergraduate Programs Office to plan curriculum requirements.

## DEGREES

The College of Business awards the Bachelor of Science degree upon successful completion of a four-year curriculum of 120 semester hours as prescribed above. Students may select one of the majors shown in the "College of Business Degrees, Majors, and Concentrations" table, page 225. Each major is administered by the academic unit indicated.

## Master's Degrees

The Master of Business Administration degree, the Master of Health Services Administration degree, the Master of Accountancy degree, the Master of Science degree with a major in Decision and Information Systems, the Master of Taxation, and the Master of Science degree in Economics are awarded upon successful completion of programs detailed in the Graduate Catalog.

## Master of Business Administration.

 The central theme of the M.B.A. program is to build and to strengthen capabilities in three areas: knowledge and analysis of the functional areas of business, basic skills, and managerial abilities. There is a strong team emphasis throughout the ASU curriculum, and the faculty are working with new cooperative learning techniques that emphasize student participation. An important feature is the attention to diversity both in the ability to manage in a diverse environment and in the student body composition.
## Certificate in Investment Valuation

 and Management. This certificate is offered to second year M.B.A. students with an interest in the field of investment valuation and professional money management. It is intended to provide a comprehensive skill set to those students who wish to pursue careers as security analysts, portfolio/money managers, investment advisors, brokers and dealers, and other investment-oriented positions at banks and bank trust departments, mutual funds, investment advisory firms, money management concerns, brokerage firms, investment banking houses, and other types of financial institutions.
## Certificate in Financial Management

 and Control. The objective of the twelve hour financial management and control track is to develop basic skills required for financial management careers. Completion of one of the four specialty clusters (required for certification) provides the opportunity for ASU M.B.A.'s to further develop indepth knowledge and industry specialization which may accelerate their professional career or be required for recruitment. A certificate will provide a strong signal of quality and competence that will be recognized and valued by peers and recruiters. M.B.A.'s who
## College of Business Degrees, Majors, and Concentrations

| Major | Degree | Administered by |
| :---: | :---: | :---: |
| Baccalaureate Degrees |  |  |
| Accountancy | B.S. | School of Accountancy |
| Computer Information Systems | B.S. | Department of Decision and Information Systems |
| Economics | B.S. | Department of Economics |
| Finance | B.S. | Department of Finance |
| Management | B.S. | Department of Management |
| Marketing | B.S. | Department of Marketing |
| Purchasing and Logistics Management | B.S. | Department of Business Administration |
| Real Estate | B.S. | Department of Business Administration |
| Graduate Degrees |  |  |
| Accountancy | M.Acc. | School of Accountancy |
| Business Administration | M.B.A. | College of Business |
| Business Administration <br> Concentrations: accountancy, decision and information systems, finance, management, marketing, purchasing and logistics management | Ph.D. | College of Business |
| Decision and Information Systems | M.S. | Department of Decision and Information Systems |
| Economics | M.S., Ph.D. | Department of Economics |
| Health Services Administration | M.H.S.A. | School of Health Administration and Policy |
| Statistics | M.S.* | Committee on Statistics |
| Taxation | M.Tax. | School of Accountancy |

* This program is administered by the Graduate College. See the "Graduate College" section of this catalog.
face competition in the employment market from experienced managers and graduates of longer M.B.A. programs (many aspirant programs require 54-60 hours of coursework) may choose a certificate program to develop a professional career focus and establish equivalent credentials.

Certificate in Treasury Management. The Certificate in Treasury Management program is offered to second year M.B.A. students with an interest in the treasury functions of a corporation. It is intended to provide a comprehensive skill set to those students who wish to pursue careers as corporate treasurers and credit executives.

## Master of Health Services Admini-

 stration. The M.H.S.A. program is designed to prepare qualified individuals seeking careers as administrators of hospitals and health care organizations and as consultants to health management firms, accounting firms, and policy makers in state and federal agen-cies. This preparation is carried out by providing the students with selected theories, tools and techniques - the understanding, analysis, and application that are essential for effective health services administration.

The program consists of a minimum of 48 semester hours: 15 hours of business courses, 24 hours of health services administration courses, and nine hours of electives.

Master of Accountancy. The M.Acc. program is designed to provide professional competency in a variety of fields in accounting. In addition to a broadly oriented degree program, the student may choose to specialize in accounting information systems/electronic data processing auditing.

## Decision and Information Systems-

 M.S. The M.S. degree program in Decision and Information Systems is specialized and stresses the application of decision and information systems to business, economic, governmental, andsocial issues. It includes substantial familiarization with computer-based systems and quantitative methods to facilitate managerial planning, decision analysis, and control. The program of study consists of a minimum of 30 semester hours with six hours in required study and 24 hours in electives to support an area of specialization. The Department of Decision and Information Systems also participates with the Department of Mathematics to allow students to earn the Master of Science degree with a major in Statistics.

Economics-M.S. The M.S. degree program in Economics is a specialized program for students who desire to teach in community colleges, to prepare for research positions in business and government, or to take additional graduate work in economics. The program requires graduate work in macroeconomic analysis, microeconomic analysis, and quantitative methods.

Master of Taxation. The M.Tax. degree program is specialized to equip persons with the highly technical and demanding skills required to administer the tax laws in both the private and public sectors of the economy.
Business Administration-Ph.D.
The Ph.D. degree program in Business Administration prepares individuals to teach and conduct scholarly research in a specialized area of concentration in the field of business. This program also prepares individuals for positions in business or government agencies for which the required educational background is doctoral-level study. Prerequisites for the Ph.D. degree program include computer skills and mathematical competence through linear algebra and calculus. The program of study includes graduate study in economics, behavioral sciences, and quantitative/statistical analysis. The advanced program is composed of an area of concentration and supporting course work that best prepares students for conducting scholarly work in their areas of interest. The degree is granted upon the completion of an approved program of graduate study course work, the successful completion of comprehensive written and oral examinations, and the submission of an acceptable original research project presented in a dissertation.

## Economics-Ph.D.

The Ph.D. degree in Economics is awarded upon the successful completion of the program as described in the Graduate Catalog. Primary objectives of this degree program are to prepare persons for research positions in public agencies and private business organizations and for teaching and research in institutions of higher learning. The degree is granted upon the completion of an approved program of graduate study, the successful completion of comprehensive written and oral examinations, and the submission of an acceptable original research project presented in a dissertation.

## GRADUATION REQUIREMENTS

B.S. Students seeking a B.S. degree in the College of Business must satisfactorily complete a curriculum of 120 semester hours.

## Graduation Requirements

In addition to fulfilling college and major requirements, students must meet all university graduation requirements. See pages 66-70.

## First-Year Composition Requirement

Completion of both ENG 101 and 102 or ENG 105 with a grade of "C" is required for graduation from ASU in any baccalaureate program. See page 66.

## General Studies Requirement

All students enrolled in a baccalaureate degree program must satisfy a university requirement for a minimum of 35 hours of approved course work in General Studies, as described on pages 71-74.

General Studies courses are listed on pages 74-94, in the course descriptions, in the Schedule of Classes, and in the Summer Sessions Bulletin.

## College Degree Requirements

 College degree requirements supplement the General Studies requirement with additional course work from the list of approved courses. Business courses may not be used to fulfill college degree requirements except for ECN 111 and 112 and QBA 221.A well-planned program of study may enable students to complete many General Studies and college degree requirements concurrently. Students are encouraged to consult with an academic advisor in planning a program to ensure that they comply with all necessary requirements.

Specific courses from the following areas must be taken to fulfill the college degree requirement.

Social and Behavioral Sciences. College of Business students must complete ECN 111 and 112, one course with a PGS prefix, one course with an SOC prefix, and may include these courses toward the General Studies requirements.
Science and Mathematics. College of Business students must complete MAT 119 and MAT 210 (or a more advanced MAT course), QBA 221, and may include these courses toward the General Studies requirements.

Historical Awareness or Cultural Diversity in the United States. College of Business students must complete at least one approved H course or one approved C course.

Communication. All students in the College of Business except Accountancy majors must complete COM 100, 230 , or 259 . Accountancy majors must complete COM 100 (or 230) and 259.

Global Awareness. College of Business students must complete at least one G course. Accountancy majors must complete two G courses.

Additional Courses. Additional courses, as needed to complete 60 hours, may be selected from the General Studies areas as noted on pages 74-94 or from the College of Business Policy Statement. Students are encouraged to consult with an academic advisor to ensure that they comply with all necessary requirements. Business courses may not be used to fulfill this requirement except for ECN 111 and 112 and QBA 221.

## Major Requirements

A major consists of a pattern of 1824 semester hours in related courses falling primarily within a given subject field. Available majors are shown in the "College of Business Degrees, Majors, and Concentrations" table on page 225.

Major Proficiency Requirements. Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below "C" in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in that major.

## Business Core Requirements

To obtain an understanding of the fundamentals of business operation and to develop a broad business background, every student seeking a Bachelor of Science degree in the College of Business must complete the following courses:

## Lower-Division Business Core

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ACC 230 Uses of Accounting Information I 3
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ACC 240 Uses of Accounting
Information II ........................ 3

CIS 200 Computers in Business N3 .... 3
Total lower-division business core. .. 9

## Upper-Division Business Core

| BUS | 301 | Fundamentals of Management Communication L1.. |
| :---: | :---: | :---: |
| COB | 300 | Strategic Bu |
|  |  | Foundations L2. |
| COB | 394 | Business Forum |
| FIN | 300 | Fundamentals of Finance....... 3 |
| LES | 305 | Legal, Ethical, and |
|  |  | Regulatory Issues in |
|  |  | Business.. |
| MGT | 301 | Management and |
|  |  | Organization Behavior ......... 3 |
| MKT | 300 | Principles of Marketing........ 3 |
| OPM | 301 | Operations and Logistics |
|  |  | Management ........................ 3 |
| International business course.................... 3 |  |  |
|  |  | vision business core |
|  |  |  |

Accountancy and Computer Information Systems majors should refer to their specific requirements on pages 229-230 and 233-234 which list variations in the business core courses.

Core Proficiency Requirement. Students must receive grades of "C" or better in upper-division business core courses to graduate. If a student receives a grade below "C" in any of these courses, the course must be repeated. University policy states a course may be repeated only one time.

## Elective Courses

Sufficient elective courses are to be selected by the student to complete the total of 120 semester hours required for graduation.

## Pass/Fail

Business majors may not include among the credits required for graduation any courses taken at this university on a pass/fail basis. Pass/fail credits taken at another institution may be petitioned for use, but only if the student can demonstrate proof that the pass grade was equivalent to a " C " or higher.

## Additional Graduation

 RequirementsIn addition to completion of the pattern of courses outlined above, to be eligible for the Bachelor of Science degree in the College of Business, a student must

1. have completed at least 30 semester hours at ASU Main;
2. have attained a cumulative GPA of 2.00 or higher for all courses taken at this university, for all business courses taken at this university, and for all courses for the major taken at this university;
3. have earned a "C" or better in each course in the business core and each course in the major;
4. have earned a minimum of 51 semester hours in traditional courses designed primarily for junior or senior students and completed in an accredited, four-year degree-granting institution; and
5. have met all university degree requirements.
Exceptions. Any exception to the above requirements must be approved by the Standards Committee of the College of Business.
Program of Study Requirement. A student in a professional program must complete a formal Undergraduate Program of Study during the semester in which the student completes 87 semester hours. The Program of Study guides the student in accomplishing successful completion of degree requirements in a timely manner. Students who have not met the above requirement are prevented from further registration.

## ACADEMIC STANDARDS

Probation. All students, freshman through senior, must maintain a minimum GPA of 2.00 for all courses completed at ASU. If these standards are not maintained, the student is placed on probation.

Disqualification. A student who is on probation becomes disqualified if (1) the student obtains a semester GPA below 2.50 or receives a grade below " C " in one or more courses or if (2) the student has not returned to good standing by the end of two consecutive semesters.

Students who have been academically disqualified are not permitted to enroll in upper-division business courses during summer sessions.

Reinstatement and Readmission. Students seeking reinstatement (after disqualification) or readmission (after
an absence from the university) should contact the Undergraduate Programs Office regarding procedures and guidance for returning to good standing.

Academic Dishonesty. The faculty of the College of Business have adopted a policy on academic dishonesty. A copy of the policy may be obtained in the Undergraduate Programs Office.

## Student Appeal Procedure on

Grades. The faculty of the College of Business have adopted a policy on the student appeal procedure on grades. A copy of the policy may be obtained in the Undergraduate Programs Office.

## SPECIAL PROGRAMS

Academic Access Program. The Academic Access Programs (AAP) Office was established to serve the College of Business in achieving its mission of increasing the ethnic diversity of the student body throughout its academic programs. To that end, AAP is charged with increasing targeted minority student representation and graduation rates through effective development, design, and implementation of programs, projects, and activities that facilitate and fulfill the student affirmative action goals and objectives of the college. Therefore, efforts of the AAP are programmatically directed to the attainment of objectives evolved from this mission and are compatible with and supportive of the philosophical stance embodied in the mission of the college and university. For more information, contact the AAP Office at 602/9654066.

Asian Studies. Students in the College of Business may pursue a program with an emphasis in Asian studies as part of the Bachelor of Science degree requirements in business. At least 30 upperdivision semester hours of the program must be in Asian studies content courses. Reading knowledge of an Asian language is required. The Asian studies content program must be approved by the Center for Asian Studies (see pages 110-111). Fulfillment of the requirements is recognized on the transcript as a bachelor's degree with a designation of the Asian studies discipline. It is possible to complete the
certificate program in International Business Studies and the Asian studies emphasis concurrently.

## Certificate in Entrepreneurship and

 Small Business Management. A curriculum in entrepreneurship and small business management is available to all students at ASU. The curriculum is designed to give students entrepreneurship concepts, organizational theories, a unique set of skills, and practical experiences utilizing pedagogical methods such as collaborative learning, lectures, case studies, in-class presentations, and a variety of relevant guest speakers from the business community. Students who complete the curriculum have an opportunity to participate in the center's business plan competition where finalists and the winner may receive start-up capital to launch the company. These start-up funds come from external private sources.The Certificate in Entrepreneurship and Small Business Management is offered as a stand-alone program for business and non-business majors, and as a program within the minor in Business for non-business majors. Both options require 15 semester hours of classes of which the following 12 semester hours must be included:

ACC 394 Financial Analysis and Planning for Small Business.. $\qquad$ . 3

COB 394 Internship Project and Business Plan Completion..................... 3
MGT 394 Introduction to Entrepreneurship $\qquad$
MKT 394 Market Analysis and Planning for Small Business.

For non-business majors wanting the certificate within the Minor in Business, the remaining three semester hours are satisfied with an elective relevant to the student's business plan and approved by a College of Business academic advisor. This elective cannot be a course used to satisfy the credit hour requirements for the major. To complete the minor, students must obtain the requirements from the Undergraduate Programs office in the College of Business and complete the specified business courses with a grade of "C" or better. The upper division courses for the minor are restricted to students with 56 semester hours and in good standing with the university.
For business, and non-business majors wanting the stand-alone certificate,
the remaining three semester hours are satisfied with an elective relevant to the student's business plan and approved by a College of business academic advisor. To receive the certificate, students must complete the specified business courses with a grade of "C" or better.

Certificate in International Business Studies. See page 240 for the requirements of this certificate.

Honors Program. The Business Honors Program provides opportunities for academically talented business students to interact with other such students and faculty both inside and outside the classroom. The result is a challenging and enriched business education. The program focuses on students in the professional business program. However, freshmen and sophomores are offered honors breakout sections in core courses and are invited to attend selected events, such as seminars and luncheons with top business leaders.

Upon acceptance into the program, an enriched learning experience begins. The honors course work, consisting of at least 18 hours of upper-division honors courses, offers a demanding curriculum taught by highly motivated faculty. Some aspects of the program extend beyond the normal classroom setting in order to broaden the education experience, including special honors scholarships, student/faculty mixers, corporate breakfasts, professional seminars and panel discussions, and "Shadow Day" events with top business leaders. An academic advisor is assigned strictly to assist honors students in course selection, to monitor progress toward the honors degree, and to be actively involved in career and educational guidance upon completion of the degree.

For more information, call 602/9658710 or stop by the Honors Program office at BAC 226. Interested students should also contact the University Honors College at 602/965-2359.
Latin American Studies. Students in the College of Business may pursue a program with an emphasis in Latin American area studies. At least 30 up-per-division semester hours of the program must be in Latin American content courses, including 15 semester hours of Latin American content courses in the College of Business listed on page 240 under International Business Studies (except ECN 365) and

15 semester hours of Latin American content courses in other disciplines. A reading knowledge of either Spanish or Portuguese is required; a reading knowledge of both is recommended. The Latin American content program must be approved by the Center for Latin American Studies (see page 111). Fulfillment of the requirements is recognized on the transcript as a bachelor's degree with a designation of the Latin American studies discipline. It is possible to complete the certificate program in International Business Studies and the Latin American emphasis concurrently.

Pre-law Studies. Pre-law students may pursue a program of study in the College of Business. Courses in accounting, economics, finance, insurance, labor relations, and statistics are recommended for any student planning to enter the legal profession.

The admission requirements of colleges of law differ considerably. The student should communicate with the dean of the law school the student hopes to attend to plan a program to meet the requirements of that school. Most law schools, including the ASU College of Law, require a baccalaureate degree for admission, although some permit admission upon completion of three years of college work.

Students who plan to take a bachelor's degree before entering law school may follow any field of specialization in the College of Business. Within the College of Business are faculty members who are lawyers and who serve as advisors for students desiring a pre-law background.

Certificate in Quality Analysis. See page 234 for the requirements of this certificate.

## RESEARCH CENTERS

The College of Business houses eight research centers. These centers provide support for faculty research, give opportunities for advanced graduate students' involvement with faculty, and provide information and assistance to the business community on a wide variety of subjects. Operating under the umbrella of the L. William Seidman Research Institute, these centers are

1. the Arizona Real Estate Center;
2. the Center for Advanced Purchasing Studies;
3. the Center for Advancement of Small Business;
4. the Center for Business Research;
5. the Center for Financial Systems Research;
6. the Economic Outlook Center;
7. the First Interstate Center for Services Marketing; and
8. the Joan and David Lincoln Center for Ethics.
The college is the site of the National Science Foundation's Industry/University Cooperative Research Center for Health Management. The center is a collaborative effort with the Network for Healthcare Management. Center university partners are ASU, Northwestern University, Ohio State University, San Diego State University, the University of California at Berkeley, the University of California at Los Angeles, the University of Colorado at Denver, the University of Michigan, the University of Missouri, University of Southern California, the University of Toronto, the University of Washington, and Virginia Commonwealth University.
The industry sponsors are Baylor Health Care System in Dallas; Franciscan Health Group West in Tacoma, Washington; HealthPartners of Southern Arizona in Tucson; Intermountain Health Care, Inc. in Salt Lake City; Mercy Health Services in Farmington Hills, Michigan; Northwestern Healthcare Network in Chicago; Samaritan Health System in Phoenix; Sisters of Charity Health Care Systems in Cincinnati; and Virginia Mason Medical Center in Seattle.

## COLLEGE OF BUSINESS

COB 300 Strategic Business Foundations. (3) F, S, SS

A strategic, integrative foundation of key business issues covering all disciplines. Issues include ethics, globalization, diversity, quality, and interpersonal skills. Lecture, lab. Prerequisite: open only to first semester professional program business students. General Studies: L2.

## School of Accountancy

Philip M.J. Reckers<br>Director

(BA 223) 602/965-3631

## PROFESSORS

BOATSMAN, BOYD, FLAHERTY, JOHNSON, KAPLAN, McKENZIE, PANY, RECKERS, RENEAU, SCHULTZ, SHRIVER, R. SMITH, TIDWELL, WILKINSON, WYNDELTS

## ASSOCIATE PROFESSORS

CHRISTIAN, GOLEN, KNEER, MOECKEL, O'DELL, PEI, REGIER

ASSISTANT PROFESSORS
DAVID, GRASSO, GUPTA, HWANG, K. SMITH

## SENIOR LECTURERS

JONES, MAGILL, MacCRACKEN

## LECTURER TORMEY

PROFESSORS EMERITI
FRITZEMEYER, HARIED, HUIZINGH, HUNTINGTON, IMDIEKE, RABY, SANDERS

The major in Accountancy includes the essential academic preparation for students

1. pursuing professional careers in public accounting;
2. seeking positions as controllers, heads of accounting divisions, cost accountants, or internal auditors;
3. seeking accounting positions in federal, state, and local governments; or
4. planning to operate their own businesses.
The major in Accountancy consists of the following 24 semester hours:

| ACC | 330 | Accounting Information <br> Systems............................. 4 |
| :--- | :--- | :--- | :--- |
|  |  |  |
| ACC | 340 | External Reporting I ............ 4 |

As part of the requirements, all Accountancy majors must complete the following courses:
$\begin{array}{lll}\text { ACC } 250 & \begin{array}{l}\text { Introductory Accounting } \\ \\ \\ \text { Lab......................................... } 1\end{array}\end{array}$
COM 100 Introduction to Human Communication ...................... 3 or COM 230 Small Group Communication $S B$ (3)
COM 259 Communication in Business and the Professions ${ }^{1}$................ 3
ECN 306 Survey of International Economics ${ }^{2}$ SB ....................... 3
ENG 301 Writing for the Professions L1 ....................... 3
${ }^{1}$ This course may be counted in the business core in place of BUS 301.
2 This course may be counted in the business core as an international business course.

In addition, Accountancy majors must complete three CIS courses approved by the School of Accountancy (one of these courses must be CIS 200 Computers in Business or an introduction to "C" language which may be used in the business core) and six semester hours of global awareness courses in addition to ECN 306.

Admission. To be considered for admission to the Accountancy major, a student must (1) meet the College of Business admission requirements and (2) have received a grade of " $B$ " or higher in both ACC 230 and 240 or their equivalents.

Academic Progress. In addition to college and university requirements, Accountancy majors must receive grades of " $C$ " or higher in the required upper-division Accounting courses. If an Accountancy student receives a grade below " C " in any required upperdivision accounting course, this course must be repeated before any other up-per-division accounting course can be taken. If a second grade below "C" is received in either an upper-division accounting course already taken or in a different upper-division accounting course, the student is no longer eligible to take additional upper-division accounting courses.

## Major Proficiency Requirements.

 Students must receive grades of "C" or higher in upper-division courses for the major.Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements. See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## ACCOUNTANCY

ACC 230 Uses of Accounting Information I. (3) F, S, SS

Introduction to the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. Prerequisite: sophomore standing.
240 Uses of Accounting Information II. (3) F, S, SS
Introduction to the uses of accounting information focusing on the evolution of the business cycle and how accounting information is used for internal and external purposes. Prerequisites: ACC 230; sophomore standing.
250 Introductory Accounting Lab. (1) F, S, SS
Procedural details of accounting for the accumulation of information and generation of reports for internal and external users. Lab. Prerequisites: ACC 230; sophomore standing.

## 315 Financial Accounting and Reporting.

 (3) F, SAccounting theory and practice related to uses of financial statements by external decision makers. Prerequisites: ACC 240, 250; non-Accountancy major.
316 Management Uses of Accounting. (3) F, S
Uses of accounting information for managerial decision-making, budgeting, and control. Prerequisites: ACC 240; non-Accountancy major.
330 Accounting Information Systems. (4) F, S, SS
Knowledge related to accounting information systems, emphasizing managerial decisionmaking and support, transaction processing, controls, computer technology, and systems development. 3 hours lecture, 3 hours lab. Prerequisites: CIS 200; professional program business student majoring in Accountancy.
340 External Reporting I. (4) F, S, SS
Financial accounting theory and practice related to external reporting. 3 hours lecture, 3 hours lab. Prerequisites: ACC 250, 330 (grade of " C " or higher); FIN 300; professional program business student majoring in Accountancy.
350 Internal Reporting. (4) F, S, SS
Internal reporting systems for planning, control, and decision making. 3 hours lecture, 3 hours lab. Prerequisites: ACC 250, 330 (grade of "C" or higher); OPM 301; professional program business student majoring in Accountancy.
430 Taxes and Business Decisions. (4) F, S, SS
Federal income taxation of sole proprietors, partnerships, corporations, fiduciaries, and individuals with an emphasis on tax consequences of business and investment decisions. 3 hours lecture, 3 hours lab. Prerequisites: ACC 340 (grade of "C" or higher); LES 305; professional program business student majoring in Accountancy.

432 Problems in Managerial Accounting. (3) N

Cases and computer applications in decisionmaking, planning and control, and capital budgeting. Prerequisites: ACC 350 (grade of "C" or higher); professional program business student majoring in Accountancy.
440 External Reporting II. (4) F, S, SS Continuation of ACC 340 External Reporting I with emphasis on the recognition, research, and resolution of financial reporting issues. 3 hours lecture, 3 hours lab. Prerequisites: ACC 340 with a grade of "C" or higher; professional program business student majoring in Accountancy.
450 Principles of Auditing. (4) F, S
Standards and procedures in auditing. Planning, evidence gathering and accumulation, and reporting. Ethical and legal considerations. 3 hours lecture, 3 hours lab. Prerequisites: ACC 440 (grade of "C" or higher); professional program business student majoring in Accountancy.
452 Advanced Taxation. (3) N
Advanced problems in business and fiduciary income tax, estate and gift tax, planning, and research. Prerequisites: ACC 430 (grade of " C " or higher); professional program business student majoring in Accountancy.
467 Management Advisory Services. (3) N Concepts and methods of providing advisory services with respect to accounting information systems and financial analysis. Administration of consulting practices. Prerequisites: ACC 330 (grade of " $C$ " or higher); professional program business student majoring in Accountancy.

## 475 Accounting in Public-Sector Organiza-

## tions. (3) N

Principles of accounting and reporting, and budgeting and financial control systems applied in governmental units and other nonbusiness organizations. Prerequisites: ACC 316 or 350 (grade of " $C$ " or higher); professional program business student majoring in Accountancy.
483 Advanced Accounting. (3) N
Accounting theory related to business combinations, consolidated financial statements, foreign operations, partnerships, and non-business organizations. Prerequisites: ACC 440 (grade of " C " or higher); professional program business student majoring in Accountancy.
495 Contemporary Accounting Theory. (3) N
Theory of financial accounting and reporting requirements for profit-oriented enterprises. Prerequisites: ACC 440 (grade of "C" or higher); professional program business student majoring in Accountancy.
502 Financial Accounting. (3) F, S
Financial accounting concepts and procedures for external reporting. Prerequisites: calculus; computer literacy; graduate degree program student.
503 Managerial Accounting. (3) F, S
Managerial accounting concepts and procedures for internal reporting. Prerequisites: ACC 502; ECN 502; QBA 502.
511 Taxes and Business Strategy. (3) F Economic implications of selected management decisions involving application of federal income tax laws. Recognition of tax hazards and tax savings. Prerequisite: ACC 502 or equivalent.

515 Professional Practice Seminar. (3) F, S History, structure, environment, regulation, and emerging issues of the accounting profession.
521 Tax Research. (3) F, S
Tax research source materials and techniques. Application to business and investment decisions. Prerequisite: ACC 430.

## 533 EDP Auditing. (3) S

Analysis of EDP audit techniques and evaluation methods. Emphasis on current topics such as distributed processing and microcomputers. Prerequisite: ACC 450.
541 Managerial Accounting Controls. (3) F Impact of internal reporting systems on organizational decisions and human behavior. Design, implementation, and evaluation prob lems. Prerequisite: ACC 350 or 503
557 Microcomputers in Accounting Information Systems. (3) A
Development of conceptual understanding of microcomputer technology and business applications from strategic planning and managerial control perspectives. Prerequisite: ACC 330.

567 Financial Models in Accounting Systems. (3) S
Development and application of financial models by accountants. Analysis of decision support systems as financial modeling environments. Prerequisite: ACC 330.
571 Taxation of Corporations and Shareholders. (3) F, S
Tax aspects of the formation, operation, reorganization, and liquidation of corporations and the impact on shareholders. Prerequisite: ACC 430.
573 Taxation of Partners and Partnerships. (3) A

Tax aspects of the definition, formation, operation, liquidation, and termination of a partnership. Tax planning is emphasized. Prerequisite: ACC 430.
575 Estate and Gift Taxation. (3) A
Tax treatment of wealth transfers at death and during life time, with emphasis on tax planning. Prerequisite: ACC 430.
577 Taxation of Real Estate Transactions. (3) A

Income tax aspects of acquisition, operation, and disposal of real estate; syndications, installment sales, exchanges, dealer-investor is sues, alternative financing, and planning. Prerequisite: ACC 521 or instructor approval.
582 Auditing Theory and Practice. (3) N Function and responsibility of the auditor in modern society. Advanced topics in auditing theory and methods. Contemporary issues in auditing. Prerequisite: ACC 450.
586 Problems in Financial Accounting. (3) F
Accounting theory and practice for external reporting. Prerequisite: ACC 503.
587 Computerized Accounting Systems. (3) F

Design and evaluation of computer-based accounting information system. Development of computer-based financial models for planning and control. Prerequisite: ACC 330.

## Department of Business Administration

Larry R. Smeltzer Chair

(BA 318) 602/965-3231

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PROFESSORS
J. CARTER, P. CARTER, GUNTERMANN, HENDRICK, JENNINGS, METCALF, SMELTZER
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## ASSOCIATE PROFESSORS

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ARANDA, BOHLMAN, BUTLER, DANIEL, DAVIS, DUNDAS, LEONARD, LOCK, LYNCH, MURRANKA, PEARSON
```


## ASSISTANT PROFESSORS

``` ELLRAM, FERRIN, REISS
SENIOR LECTURERS FLYNN, GEISS
REGENTS' PROFESSOR EMERITUS FARRIS
```

PROFESSORS EMERITI<br>BATY, BOGGS, FEARON, GARCIA, HENNINGTON, JACKS, LEWIS, MYLER, REUTER, A. SMITH, C. SMITH, TATE<br>\section*{SENIOR LECTURER EMERITUS} WIGGINS

The Department of Business Administration offers courses in four separate areas: legal and ethical studies, management communication, purchasing and logistics management, and real estate.

## Legal and Ethical Studies

The legal and ethical studies faculty offer the undergraduate and the Master of Business Administration (M.B.A.) core requirements in legal and ethical studies. In addition, the faculty offer specialized courses in law and ethics relating to health care, insurance, real estate, and professional sports.

## Management Communication

The management communication faculty serve the College of Business by teaching the Bachelor of Science core requirement BUS 301 Fundamentals of Management Communication. In addition, the faculty teach BUS 502

Managerial Communication, a core course in the M.B.A. degree, as well as other management communication courses.

## Real Estate

The Real Estate faculty offer a unique one-year program designed for the students' last year of college. This innovative program emphasizes student involvement with real estate executives on projects in the Phoenix metropolitan area. Students are organized in teams to develop their analytical, communication, and team skills.

The program is organized around five aspects of real estate: brokerage/ management, development, financing, investments, and market analysis. With the broad interdisciplinary perspective, emphasis on team work, and involvement in projects, students may pursue careers in land development, investment analysis, appraisal, property management, brokerage, and finance.

Successful completion of the program satisfies the requirements of an 18 -hour major based on the following courses:

LES 411 Real Estate Law...................... 3
REA 300 Real Estate Analysis.............. 3
REA 331 Real Estate Finance ................ 3
REA 401 Real Estate Appraisal ............ 3
REA 441 Real Estate Land
Development $\qquad$
REA 456 Real Estate Investments
Because of the emphasis on teamwork, interaction with business professionals, and completion of all requirements within a year, students may enter the program only in the fall semester.

## Major Proficiency Requirements.

Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below "C" in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in that major.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements.

See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## Purchasing and Logistics Management

The major in Purchasing and Logistics Management includes the functions of planning, organizing, and controlling the flow of purchased materials into and out of the organization. Attention is given to analyzing and selecting suppliers, price determination, value analysis, and investment recovery. Emphasis is also on the efficient use of transportation services by business management within a framework of logistics systems, government transportation policy relative to freight and passengers transportation, and the management of transportation shipper and carrier organizations. Graduates are employed by industrial firms, carriers, and governmental agencies.

The major in Purchasing and Logistics Management consists of the following 18 semester hours:

| PLM | 345 | Traffic and Logistics <br> Management ...................... 3 |
| :--- | :--- | :--- |
| PLM | 355 | Purchasing and Supplier <br> Management ..................... 3 |
| PLM | 432 | Materials Management ........ 3 |
| PLM | 440 | Productivity and Quality <br> Management ........................ 3 |
| PLM | 455 | Purchasing Research <br> and Negotiation ................. 3 |
| PLM | 479 | Purchasing and <br> Logistics Strategy.................. 3 |

## Major Proficiency Requirements.

Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below " C " in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in that major.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements. See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## LEGAL AND ETHICAL STUDIES

LES 305 Legal, Ethical, and Regulatory Issues in Business. (3) F, S
Legal theories, ethical issues, and regulatory climate affecting business policies and decisions.

## 306 Business Law. (3) A

Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letters of credit, and bank deposits and collections.
307 Business Law. (3) A
Legal and ethical aspects of agency, partnerships, corporations, bankruptcy, antitrust, securities, and other regulations of businesses.
308 Business and Legal Issues in Professional Sports. (3) N
The economic structure of professional sports and application of contract, antitrust, arbitration, and labor laws in the industry.
411 Real Estate Law. (3) A
Legal and ethical aspects of land ownerships, interests, transfer, finance development and regulations of the real estate industry.

## 412 Insurance Law. (3) N

Legal concepts and doctrines applicable to the field of insurance. Prerequisite: professional program business student.
532 Negotiation Agreements. (3) F, S
Course develops negotiation competencies to build partnerships and create lasting agreements with internal/external customers, suppliers, work teams, and external constituencies. Lecture and substantial student interaction through team exercises.
579 Legal, Political, and Ethical Issues for Business. (3) N
Study of legal, ethical, and political components of business decisions; self-regulation and social responsibility as regulatory and political strategies. Prerequisites: ACC 503; FIN 502; MGT 502; MKT 502.

## BUSINESS ADMINISTRATION

BUS 301 Fundamentals of Management Communication. (3) F, S, SS
Intrapersonal, interpersonal, and administrative communication within management contexts. Prerequisites: CIS 200; ENG 102 with a grade of "C" or higher. General Studies: L1.
431 Business Report Writing. (3) N
Organization and preparation of reports incorporating electronic databases, word processing, and graphics. Prerequisite: BUS 301.
451 Business Research Methods. (3) N Methods of collecting information pertinent to business problem solving, including design, collection, analysis, interpretation, and presentation of primary and secondary data.
502 Managerial Communication. (3) F, S, SS
Analysis of various business problems, situations, and development of appropriate communication strategies. Prerequisite: MGT 502.
504 Professional Report Writing. (3) A Preparation and presentation of professional reports.
507 Business Research Methods. (3) N Techniques for gathering information for business decision making. Selection, design, and completion of a business-oriented research

## project.

591 Seminar. (3) N
Selected managerial communication topics.
594 Study Conference or Workshop. (3) N
700 Research Methods. (3) N

## PURCHASING AND LOGISTICS MANAGEMENT

PLM 301 Purchasing/Materials and Logistics Management. (3) N
Examines the purchasing, materials, and logistics management areas. Techniques for acquiring, storing, processing, and moving mate-
rial inventory are presented. Prerequisite: professional business program.

## 345 Traffic and Logistics Management. (3)

 F, SManaging logistics activities with emphasis on integrating transportation needs with inventory, warehousing facility location, customer service, packaging, and materials handling. Prerequisites: OPM 301; professional program business student.

## 355 Purchasing and Supplier Management

(3) F, S

Management of the purchasing function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. Prerequisites: OPM 301; professional program business student.
405 Urban Transportation. (3) N
Economic, social, political, and business aspects of passenger transportation. Public policy and government aid to urban transportation development. Prerequisite: upper-division standing or instructor approval.
432 Materials Management. (3) F, S
Study of managing the productive flow of materials in organizations, including MRPII, JIT, quality, facility planning, and job design. Prerequisites: OPM 301; professional program business student.
440 Productivity and Quality Management. (3) F, S

Productivity concepts at the national, organizational, and individual levels. Quality management and its relationship to productivity in all organizations. Prerequisite: professional program business student.

## 455 Purchasing Research and Negotiation.

## (3) F, S

Current philosophy, methods, and techniques used to conduct both strategic and operations purchasing research and negotiation. Includes negotiation simulations. Prerequisites: OPM 301; PLM 355 (grade of "C" or higher), 432; professional program business student.
460 Carrier Management. (3) N
Analysis of carrier economics, regulation, management, and rate-making practice; evaluation of public policy issues related to carrier transportation. Prerequisite: upper-division standing or instructor approval.
463 International Transportation and Logistics. (3) A
Logistics activities in international business with special emphasis on transportation, global sourcing, customs issues, and facility location in international environment. Prerequisite: PLM 345 or instructor approval.
479 Purchasing and Logistics Strategy. (3) F, S
Synthesis of purchasing, production, transportation to provide a systems perspective of materials management. Development of strategies. Prerequisites: PLM 345, 355 (grade of " C " or higher), 432; professional program business student.
532 Supply Chain Design and Development Strategies. (3) F
A strategic orientation toward the design and development of the supply chain for purchasing, materials, and logistics systems.
541 Supply Chain Management and Control. (3) S
Management and control of purchasing and logistics management systems. Total Quality Management to assess and assure customer satisfaction. Global strategies.

545 Supply Chain Continuous Improvement Strategies. (3) S
Leading edge strategies such as
reengineering high-performance teams and expert systems for continuous improvement of the supply chain. Seminar.

## 591 Seminar. (3) N

Topics such as the following are offered:
(a) Purchasing
(b) Logistics and Transportation

791 Doctoral Seminar. (3) A
Topics may be selected from the following:
(a) Logistics, Transportation, and Physical Distribution Management.
(b) Purchasing and Materials Management.

## REAL ESTATE

REA 251 Real Estate Principles. (3) N
Regulation, practices, legal aspects, and professional opportunities of the real estate industry. Cannot be applied to Real Estate major.
300 Real Estate Analysis. (3) A
Application of economic theory and analytical techniques to real estate markets. Topics include law, finance, appraisal, market analysis, investments, development. Prerequisite: professional program business student.
331 Real Estate Finance. (3) A
Legal, market, and institutional factors related to financing proposed and existing properties. Emphasis on current financing techniques and quantitative methods. Prerequisites: FIN 300; professional program business student.
401 Real Estate Appraisal. (3) A Factors affecting the value of real estate. Theory and practice of appraising and preparation of the appraisal report. Appraisal techniques. Prerequisites: REA 300; professional program business student.
441 Real Estate Land Development. (3) A Neighborhood and city growth. Municipal planning and zoning. Development of residential, commercial, industrial, and special purpose properties. Prerequisites: REA 300; professional program business student.
456 Real Estate Investments. (3) A
Analysis of investment decisions for various property types. Cash flow and rate of return analysis. Prerequisites: FIN 300; professional program business student.
461 Current Real Estate Topics. (3) N Current real estate topics of interest are discussed and analyzed. Prerequisites: REA 300; professional program business student.
591 Seminar in Selected Real Estate Topics. (3) N
Topics may be selected from the following:
(a) Real Estate Market Analysis.

Analytical techniques used in performing market research to assess the feasibility of proposed residential, retail, office, and other developments.
(b) Real Estate Finance and Investments. Basic techniques for analyzing the financial feasibility of real estate investments. Includes cash flow, yield and risk analysis; taxation, form of ownership, and management.
(c) Real Estate Development. Development process covering feasibility, site selection, planning, design, financing, and construction. Relationship of land use controls and regulations to the private sector.
(d) Real Estate Research. Reviews current research in areas such as market studies, mortgage securement, valuation, development, investments, and government regulation.

## Department of Decision and Information Systems

(BA 267O) 602/965-4373

## PROFESSORS

 BURDICK, ECK, HERSHAUER,KAZMIER, KIRKWOOD, MAYER,
PHILIPPAKIS, RUCH, WOOD
ASSOCIATE PROFESSORS BROOKS, CALLARMAN, CARROLL, GOUL, KEEFER, KEIM, O'LEARY, REISER, ROY, ST. LOUIS, D. SMITH-DANIELS, V. SMITH-DANIELS, VERDINI, WILSON
ASSISTANT PROFESSORS
AMUNDSON, CHING, KIANG, KULKARNI, SIFERD
PROFESSORS EMERITI HUSTON, McCREADY

The Department of Decision and Information Systems is currently undergoing reorganization. Questions concerning the Computer Information Systems major should be directed to Susan Felker in the School of Accountancy, located at BA 267O, or call 602/9654373.

The major in Computer Information Systems prepares students for professional careers involving the analysis, configuration, programming, and database aspects of the design and implementation of computerized business information systems. The course work prepares the student for a career in business computer information systems and for admission to graduate programs in computer information systems or management information systems.

The major in Computer Information Systems consists of a minimum of 18 semester hours. The following 12 hours must be included:

| CIS | 330 | Object-Oriented Modeling <br> and Programming .............. 3 |
| :--- | :--- | :--- |
| CIS | 335 | Computer Information <br> Systems II ............................. 3 |
| CIS | 420 | Business Database <br> Concepts ........................... 3 |
| CIS | 440 | Systems Analysis <br> and Design......................... 3 |

To complete the major, the student selects six or more semester hours of upper-division credit approved in advance by the student's faculty advisor.

All Computer Information Systems majors must complete CSE 100 Introduction to Computer Science I or a "C" language course, which may be used as a college requirement, and CIS 235 Computer Information Systems I, which may be used in the business core in place of CIS 200.

Admission. To be admitted as a Computer Information Systems major, a student must have completed the following courses with a minimum GPA of 2.50:

CSE 100 Introduction to Computer Science I
or a "C" language course
MAT 119 Finite Mathematics N1 .......... 3
MAT 210 Brief Calculus N1 .................. 3 or a higher-level MAT course
QBA 221 Statistical Analysis N2 .......... 3
Major Proficiency Requirements. Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below " C " in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in that major.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements. See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## Certificate in Quality Analysis

The program of study leading to the Certificate in Quality Analysis prepares students to perform technical analyses associated with quality measurement and improvement of manufacturing and service processes. Graduates with the ability to implement these analyses are in high demand in the marketplace. This program is not a substitute for the listed areas of business specialization; rather, the courses required for the certificate add quantitative strength and implementation skills for quality tools to the student's chosen field of specialization.
Students are required to complete a bachelor's degree from any of the major fields of study at ASU and to complete a minimum of 15 semester hours of approved course work, including the following nine hours:

| QBA | 321 | Applied Quality Analysis I.... 3 |
| :--- | :--- | :--- |
| QBA | 421 | Applied Quality |
|  |  | Analysis II ............................ 3 |
| QBA | 450 | Operations and Process <br>  |
|  | Analysis .................................. 3 |  |

To complete the certificate, the student selects at least six additional hours of course work related to quality analysis approved in advance by the advisor for the certificate program. The student must also complete the 15 hours of course work with a minimum GPA of 2.50 .

## COMPUTER INFORMATION SYSTEMS

CIS 200 Computers in Business. (3) F, S Introduction to business information systems and the use of business application software. Prerequisite: MAT 117 or higher. General Studies: N3.
235 Computer Information Systems I. (3) F, S
Development of information systems using file-oriented languages like C and COBOL. Introduction to business technology and system analysis. Prerequisites: CSE 100; MAT 119 or 210 or 270; QBA 221.
300 Computers in Business II. (3) N Introduction to information systems in business. Use of computers for business problem solving. Prerequisites: CIS 200; FIN 300; professional program business student.
307 Systems Modeling. (3) A
Procedures for investigating and analyzing decision systems. Use of special languages as tools of analysis and simulation. Prerequisites: CSE 100; MAT 119, 210 or 270; professional program business student.

330 Object-Oriented Modeling and Programming. (3) F, S
Object-oriented modeling of business information systems. Abstract data types and objectoriented programming using a language such as C++. Prerequisites: CIS 235, professional program business student majoring in Computer Information Systems or Accountancy. 335 Computer Information Systems II. (3) F, S
Advanced business applications using a highlevel language such as COBOL. Business application systems and recent information technology developments. Prerequisites: ACC 240; CIS 235; professional program business student majoring in Computer Information Systems or Accountancy.
420 Business Database Concepts. (3) F, S Database theory, design, and application, including the entity-relationship model, the relational, hierarchical, and network database models, and query languages. Prerequisites: CIS 330; professional program business student majoring in Computer Information Systems or Accountancy. Pre- or corequisite: CIS 335.

430 Advanced Topics in Information Systems. (3) A
Advanced topics such as data communications, distributed systems, decision support systems, and artificial intelligence. Prerequisites: professional program business student majoring in Computer Information Systems or Accountancy; instructor approval.
440 Systems Analysis and Design. (3) F, S Development of business application systems using structured and object-oriented analysis and design. Use and evaluation of CASE or other tools. Prerequisites: CIS 420; professional program business student majoring in Computer Information Systems or Accountancy.
502 Management Information and Decision Support Systems. (3) F, S
Fundamentals of computer-based management information and decision support systems. Prerequisites: completion of all first-year MBA courses; QBA 502.
505 Technical Foundations of Data Management. (3) A
Data and file structures for business data management; information processing using techniques supported by languages such as C. Prerequisites: CIS 335 and a computational programming language or instructor approval.
506 Business Database Systems. (3) A Hierarchical, network, relational, and other recent data models for database systems. Processing issues such as concurrency control, query optimization, and distributed processing. Prerequisites: CIS 505 or equivalent; MAT 210.

510 Systems Models and Simulation. (3) N
Design of computer-based decision systems. Simulation as a research and decision-making tool. Prerequisites: MAT 210; QBA 502; a computational programming language.
512 Decision Support Systems. (3) A Definition, description, construction, and evaluation of computer-based decision systems. Prerequisites: CIS 502 or 505 or QBA 505; MAT 210.

515 Management Information Systems. (3) A
Systems theory concepts applied to the collection, retention, and dissemination of information for management decision making. Prerequisite: CIS 335 or 502.
520 Systems Design and Evaluation. (3) A Methodologies of systems analysis and design. Issues include project management, interface, organizational requirements, constraints, documentation, implementation, control, and performance evaluation. Prerequisite: CIS 505 or equivalent.
525 Artificial Intelligence in Business. (3) N Development and application of artificial intelligence approaches to business problem solving. Prerequisite: CIS 505 or equivalent.
530 Information Systems Development. (3) A
Object-oriented and interprocess communication and control concepts for information systems; applications based on languages such as C++ and platforms such as networked UNIX. Prerequisite: CIS 505.
535 Distributed Information Systems. (3) A Introduction to distributed systems and their impact on information systems in business. Prerequisite: ACC 587 or CIS 505.
591 Seminar in Selected CIS Topics. (3) A
Topics such as the following will be offered:
(a) Advanced Data and Knowledge Base Systems
(b) Distributed Artificial Intelligence
(c) Integrated Modeling Environments
(d) Organizational Support Systems

## QUANTITATIVE BUSINESS ANALYSIS

QBA 221 Statistical Analysis. (3) F, S
Methods of statistical description. Application of probability theory and statistical inference in business. Prerequisites: MAT 119, 210. General Studies: N2.
321 Applied Quality Analysis I. (3) A
Applications of statistical tools employed in empirical studies related to quality analysis. Applications focus on service processes. Prerequisite: QBA 221.
391 Management Science. (3) N
Study of mathematical models and solution techniques which can be used to aid decision makers. Prerequisites: MAT 119, 210, 242; QBA 221; professional program business student. General Studies: N2.
410 Applied Business Forecasting. (3) N Application of forecasting techniques in business and institutional environments. Prerequisite: QBA 321.
421 Applied Quality Analysis II. (3) A Applications of statistical tools employed in manufacturing and experimental research. Applications focus on design and improvement of processes. Prerequisite: QBA 321.
450 Operations and Process Analysis. (3) A Implementation of quantitative techniques for the analysis of quality problems related to operations and process analysis. Prerequisites: OPM 301; QBA 221.
502 Managerial Decision Analysis. (3) F, S Fundamentals of quantitative analysis to aid management decision making under uncertainty. Prerequisites: MAT 210; computer literacy; graduate degree program student.

505 Management Science. (3) N
Quantitative approaches to decision making, including linear programming and simulation, with an emphasis on business applications. Prerequisites: MAT 210; QBA 502.
510 Managerial Statistics. (3) A
Statistical methods used in decision making, including analysis of variance and simple and multiple linear regression. Prerequisites: MAT 210; QBA 502 or an introductory statistics course.
511 Sampling Techniques in Business. (3) N
Planning, execution and analysis of surveys in business research. Prerequisite: QBA 502.
525 Applied Regression Models. (3) A
Simple linear regression, multiple regression, indicator variables, and logistic regression. Emphasis on business and economic applications. Prerequisites: MAT 210; QBA 510.
527 Categorical Data Analysis. (3) N
Discrete data analysis in business research. Multidimensional contingency tables and other discrete models. Prerequisite: QBA 525.
528 Exploratory Data Analysis. (3) N Introduces student to principles and methods of exploratory data analysis. Prerequisite: QBA 502.
530 Experimental Design. (3) A
Experimental designs used in business research. Balanced and unbalanced factorial designs, repeated measures designs, and multivariate analysis of variance. Prerequisite: QBA 525 or equivalent.

535 Multivariate Methods. (3) A
Advanced statistical methods used in business research. Multivariate analysis of association and interdependence. Prerequisite: QBA 525
540 Forecasting. (3) N
Foundation of statistical forecasts and forecast intervals; application of classical and computer-assisted forecasting methods to business forecasting problems. Prerequisites: MAT 210; QBA 502.
550 Intermediate Decision Analysis. (3) N
Quantitative decision analysis methods for business decision making under uncertainty, including decision diagrams, subjective probabilities, and preference assessment. Prerequisites: MAT 210; QBA 502.
552 Statistical Decision Theory. (3) N Statistical decision methods for business decision making under uncertainty, including Bayesian inference, optimal statistical deci sions, and value of information assessment. Prerequisites: MAT 210; QBA 510 or 550.
560 Probabilistic Models. (3) N Development and application of probabilistic models for quantitative business analysis. Prerequisites: MAT 210; QBA 502.
561 Mathematical Programming. (3) N
Techniques for solving mathematical programming models of business problems. Prerequisites: MAT 210, 242.

562 Network Flow Models. (3) N Introduction to network structure, applications, and algorithms; development of data structures for network algorithms applied to business problems. Prerequisites: QBA 561 or MAT 242 and QBA 505.

564 Nonlinear Optimization. (3) N
Basic properties of solutions and algorithms for constrained and unconstrained minimization, basic descent methods, and barrie methods. Prerequisites: QBA 561 or MAT 242 and QBA 505.

## OPERATIONS AND PRODUCTION MANAGEMENT

OPM 301 Operations and Logistics Management. (3) F, S
Identification and integration of major components of operations and logistics management and their impact on organizational productivity and performance. Lecture, lab. Prerequisite: QBA 221.

502 Operations and Logistics Management. (3) F, S
Conceptual foundations for the total operations and logistics functions for all types of organizations. Application of analytical methods to production problems. Prerequisites: ECN 502; QBA 502.
540 Quality and Productivity Management. (3) A

Organizational factors influencing quality and productivity in the production of goods and services. Quality and productivity strategies improvement programs, and measurement systems. Prerequisite: OPM 502 or instructor approval.
581 Production and Inventory Management. (3) A
Planning and control of production and inventories in manufacturing and service systems. Includes strategic implications, decision-making models, and applications. Prerequisite: OPM 502 or instructor approval.
582 Capacity Management and Scheduling. (3) A

Capacity and scheduling decisions entailing the acquisition and allocation of a firm's resources, including work force, equipment, and facilities. Prerequisites: OPM 581; QBA 561.
585 Facilities Design and Management of Technology. (3) A
Decisions regarding management of facilities and technology for manufacturing and service firms. Facilities location, layout, process design, and selection. Prerequisites: OPM 581; QBA 561.
587 Project Management. (3) A
Planning, scheduling and controlling of projects in R \& D, manufacturing, construction and services. Project selection, financial considerations, and resource management. Prerequisite: QBA 502.
791 Seminar. (3) N
Topics such as the following are offered:
(a) Doctoral Seminar in Production/Operations Management
(b) Doctoral Seminar in Logistics Systems

## Department of Economics

Arthur E. Blakemore<br>Chair

(BAC 659) 602/965-3531

## PROFESSORS

BLAKEMORE, BOYES, BRADA, BURGESS, DeSERPA, FAITH, GOODING, HAPPEL, HOFFMAN, HOGAN, KINGSTON, KNOX, LOW, McDOWELL, McPHETERS, MELVIN, MÉNDEZ, ORMISTON, SCHLAGENHAUF, SMITH
ASSOCIATE PROFESSORS REFFETT, SCHLEE, WINKELMAN
ASSISTANT PROFESSORS
AHN, DATTA
LECTURER
ROBERTS
PROFESSORS EMERITI
COCHRAN, JACKSON,
LOWE, PLANTZ

The study of economics affords an opportunity for the student to acquire a general knowledge of the methods by which goods and services are allocated and incomes are generated and why prices, employment, money, and financial markets behave as they do. Some knowledge of economics is crucial not only for those intending to participate in the business world, but for those intending to pursue graduate educations in law or other business fields or to work in the world of journalism and communications.

Economists obtain positions at universities and in government, financial institutions, brokerage houses, private nonfinancial corporations, and international organizations such as the International Monetary Fund and the World Bank and as financial journalists and as marketing and management specialists in domestic and international firms.

Economics majors are required to earn a minimum grade of " C " in MAT 210 Brief Calculus (3) before taking upper-division courses in economics. While MAT 210 meets the minimum mathematics requirement to major in Economics, all Economics majors who
anticipate going on to graduate school in economics or in business or to law school are encouraged to take MAT 270 Calculus with Analytic Geometry I (4) in sections taught via the "reform calculus" method. The relevant section line numbers are available from the Department of Mathematics. Majors are encouraged to pursue further course work in mathematics. MAT 270 may be taken in lieu of MAT 210 in the science and mathematics area of the requirements described in the Advising Handbook.

The major in Economics consists of 18 semester hours of upper-division courses in economics. The following six hours must be included:

| ECN | 313 | Intermediate Macroeconomic <br> Theory $S B ~ \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 3 |
| :--- | :---: | :--- |
| ECN | 314 | Intermediate Microeconomic <br> Theory $S B ~ \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |

ECN 313 and 314 should be taken before other upper-division courses in economics. Students must earn a minimum grade of "C" in ECN 313 and 314. Concurrent enrollment in ECN 313 and 314 is permitted. Concurrent enrollment in ECN 313 or 314 and other upper-division courses in economics is subject to the approval of the faculty advisor.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements. See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## Major Proficiency Requirements.

Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below "C" in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in the major.

Other Economics Programs. For information on majoring in Economics in the College of Liberal Arts and Sciences, see pages 127-128 of this catalog.

For information on a general minor in Economics and on the minor in Economics for Students Planning a Career in Law, see page 128 of this catalog.

## ECONOMICS

ECN 111 Macroeconomic Principles. (3) F, S, SS
Basic macroeconomic analysis. Economic institutions and factors determining income levels, price levels, and employment levels. General Studies: SB.
112 Microeconomic Principles. (3) F, S
Basic microeconomic analysis. Theory of exchange and production, including the theory of the firm. General Studies: SB.
304 Current Issues in Economics and Politics. (3) A
Application of basic economic principles to contemporary issues such as crime, the environment, discrimination, health care, and the national debt. Not for Economics majors. Lecture, student projects, discussion. Prerequisites: ECN 111 or 112; 2.0 ASU GPA; junior standing. General Studies: L1/SB.
306 Survey of International Economics. (3) A
Survey of international trade issues, commercial policy, trade theory, customs unions, and international monetary topics. Not for Economics majors. Lecture, discussion. Cross-listed as IBS 306. Prerequisites: ECN 111 or 112; 2.0 ASU GPA; junior standing. General Studies: SB.
313 Intermediate Macroeconomic Theory. (3) F, S

Determinants of aggregate levels of employment, output, and income of an economy. Prerequisites: ECN 111, 112; MAT 210 (grade of "C" or higher). General Studies: SB.
314 Intermediate Microeconomic Theory. (3) F, S

Role of the price system in organizing economic activity under varying degrees of competition. Prerequisites: ECN 111, 112; MAT 210 (grade of " $C$ " or higher). General Studies: SB.
315 Money and Banking. (3) SS
Functions of money. Monetary systems, credit functions, banking practices, and central banking policy. This course cannot be applied to the Economics major. Prerequisite: ECN 111. 331 Comparative Economic Systems. (3) N Alternative institutions, past and present, for organizing the social division of labor. Property rights, information, and incentives in industrial societies. Prerequisite: ECN 111 or 112. General Studies: SB, G.
360 Economic Development. (3) N
Theories of economic growth and development. Role of capital formation, technological innovation, population, and resource development in economic growth. Prerequisite: ECN 111 or 112. General Studies: SB, G.
365 Economics of Russia and Eastern Europe. (3) A
Origins and analysis of contemporary institutions. Comparative development and differentiation in the 20th century. Prerequisite: ECN
111 or 112. General Studies: SB, G.
394 Special Topics. (3) N
Current topics of domestic or international interest. Analytical emphasis may be macro, micro, or both. See current Schedule of Classes for offerings. Not for Economics majors. Prerequisite: ECN 111 or 112.

404 History of Economic Thought. (3) N Development of economic doctrines, theories of mercantilism, physiocracy, classicism, neoclassicism, Marxism, and contemporary economics. Prerequisite: ECN 314 or instructor approval. General Studies: SB.
421 Labor Economics. (3) A
Origins of labor movement, analysis of labor unions, labor markets, collective bargaining, and current policy issues. Prerequisite: ECN 314 or instructor approval. General Studies: SB.
436 International Trade Theory. (3) A
The comparative-advantage doctrine, including practices under varying commercial policy approaches. The economic impact of international disequilibrium. Prerequisite: ECN 314 or instructor approval. General Studies: SB, G.
438 International Monetary Economics. (3) A
History, theory, and policy of international monetary economics. Balance of payments and exchange rates. International financial markets including Eurocurrency markets. Prerequisite: ECN 313 or instructor approval. General Studies: SB, G.
441 Public Finance. (3) A
Public goods, externalities, voting models, public expenditures, taxation, and budget formation with emphasis on the federal government. Prerequisite: ECN 314 or instructor approval. General Studies: L2/SB.
450 Law and Economics. (3) A
Economics of the legal system including analysis of property, contracts, torts, commercial law, and other topics. Discussion, analysis. Prerequisite: ECN 314. General Studies: L2.
453 Government and Business. (3) A
Development of public policies toward business. Antitrust activity. Economic effects of government policies. Prerequisite: ECN 314 or instructor approval.
480 Introduction to Econometrics. (3) A Elements of regression analysis: estimation, hypothesis tests, prediction. Emphasis is on use of econometric results in assessment of economic theories. Prerequisite: instructor approval. General Studies: N2.
484 Economics Internship. (3) F, S, SS Academic credit for professional work organized through the Internship Program. Prerequisites: ECN 313, 314; outstanding academic record.
485 Mathematical Economics. (3) A
Integration of economic analysis and mathematical methods into a comprehensive body of knowledge within contemporary economic theory. Prerequisite: instructor approval. General Studies: N2.

## 494 Special Topics. (3) N

Current economic topics of domestic or international interest. Analytical emphasis may be macro, micro or both. See current Schedule of Classes for offerings. Prerequisites: ECN 313 and 314 or instructor approval.
498 Pro-Seminar. (3) A
Topic chosen from current area of interest. Prerequisites: ECN 313 and 314 or instructor approval.
502 Managerial Economics. (3) F, S
Application of microeconomic analysis to managerial decision-making in areas of demand, production, cost, and pricing. Evaluation of competitive strategies. Prerequisite: MBA degree program student.

504 History of Economic Thought. (3) S Historical development of economic theory Emphasis on the development of economic analysis from preclassical economics through Keynes. Prerequisite: ECN 510 or instructor approval.
509 Macroeconomic Theory and Appli-
cations. (3) F
Theory of income, output, employment, and price level. Influence on business and economic environment. Prerequisites: ECN 111 and calculus or instructor approval.
510 Microeconomic Theory and Applications. (3) F, S
Application of economic theory to production, consumer demand, exchange, and pricing in a market economy. Prerequisites: ECN 112 and calculus or instructor approval.
511 Macroeconomic Analysis I. (3) F
Current theories of output, employment, inflation, and asset prices as well as major aggregates. Introduction to dynamic optimization techniques. Prerequisites: ECN 313 and calculus or instructor approval.
512 Microeconomic Analysis I. (3) F Theory of production, consumer demand, resource use, and pricing in a market economy. Prerequisites: ECN 314 and calculus or instructor approval.
513 Macroeconomic Analysis II. (3) F Focus on growth theory, dynamic general equilibrium models, monetary theory, openeconomy issues. Prerequisite: ECN 511 or instructor approval.
514 Microeconomic Analysis II. (3) S
General equilibrium, welfare economics, production, and capital theory. Prerequisite: ECN 512 or instructor approval.

## 515 Advanced Macroeconomic Analysis.

 (3) FFocus on current research areas in macroeconomics and monetary theory with emphasis on methods in economic dynamics and numerical techniques. Prerequisite: ECN 511 or instructor approval.

516 Economics of Uncertainty, Information, and Strategic Behavior. (3) F
Economic behavior under uncertainty; markets and contracts under asymmetric information; the theory of games with incomplete information and applications. Prerequisite: ECN 512 or instructor approval.
517 Monetary Theory. (3) F
Traditional and post-Keynesian monetary theory, interest rate determination, the demand and supply of money. Prerequisite: ECN 511 or instructor approval.
521 Labor Economics I. (3) F
Development of basic theoretical models for analyzing labor market issues. Prerequisite: ECN 510 or instructor approval.
522 Labor Economics II. (3) N
Extensions/criticisms of labor market theories. Applications to a variety of policy issues. Prerequisite: ECN 521
525 Econometrics I. (3) S
Problems in the formulation of econometric models. Emphasis on estimation, hypothesis testing, and forecast of general linear models. Prerequisite: 6 hours of statistics or instructor approval.

526 Econometrics II. (3) A
Estimation and inference of qualitative and limited dependent variable models as well as general multiple equation models. Prerequisite: ECN 525 or instructor approval.
527 Econometrics III. (3) S
Generalized method of moment estimation, estimation with censored and truncated samples, nonlinear models, panel-data models, econometrics of nonstationarities. Prerequisite: ECN 526 or instructor approval.
531 Comparative Economic Systems. (3) F Philosophical foundations of major economic systems and of properties of principal system models. Comparison of alternative institutions and system components of contemporary economies. Prerequisites: ECN 509, 510 or instructor approval.
536 International Trade Theory. (3) S
Theories of comparative advantage and their empirical verification. Theory and political economy of commercial policy. Resource transfers and the role of the multinational corporation. Prerequisites: ECN 509, 510 or instructor approval.
538 International Monetary Theory and Policy. (3) F
The foreign exchange market, balance of payments, and international financial institutions and arrangements; theory and applications. Prerequisites: ECN 509, 510 or instructor approval.
541 Public Economics. (3) S
Economics of collective action, public spending, taxation, and politics. Impact of central governmental activity on resource allocation and income distribution. Prerequisite: ECN 510 or instructor approval.
553 Industrial Organization. (3) S
Analysis of structure, conduct, and performance in industrial markets; the economics of organizations. Prerequisite: ECN 510 or instructor approval.

## 560 Economics of Growth and Develop-

 ment. (3) SEconomic problems, issues, and policy decisions facing the developing nations of the world. Prerequisites: ECN 509, 510 or instruc tor approval.
584 Economics Internship. (1-3) SS
Academic credit for professional work organized through the Internship Program. Prereq uisites: ECN 510, 511 or instructor approval
585 Mathematics for Economists. (3) F Survey of mathematical ideas encountered in economics and econometrics: nonlinear programming, the Kuhn-Tucker theorem, concave programming, optimization over time. Prerequisite: calculus or instructor approval
591 Economics Seminar. (1-3) F, S, SS Presentations by outside speakers, department faculty, and graduate students of work in progress. Prerequisite: instructor approval.
593 Applied Projects. (3) F
Preparation of a supervised applied project typically in conjunction with an internship. Prerequisites: ECN 510, 511.

594 Conference and Workshop in Economics. (1-2) F, S, SS
Topics such as the following are offered:
(a) Mathematical Statistics Workshop. (1) S Introduction to statistic principles of estimation and hypothesis testing. Prerequisite: ECN 485 or instructor approval.
(b) Econometrics Time-Series Workshop. (1) S
Extension of the analysis of cointegrated systems to include issues of identification and inference in structural VAR models.
Corequisite: ECN 527 or instructor approval.
(c) Econometrics Cross-Section Workshop. (1) S
ssues in the analysis of specific models such as double-selection and panel-data models. Corequisite: ECN 527 or instructor approval.
(d) Microeconomic Topics Workshop. (1-3) SS
Issues in microeconomic theory. Prerequisite: ECN 514 or instructor approval.
(e) Macroeconomic Topics Workshop. (1-3) SS
Issues in macroeconomic theory. Prerequisite: ECN 513 or instructor approval.
598 Special Topics. (3) N
Advanced topics in economics. Consult Schedule of Classes for offerings. Prerequisite: instructor approval.

## Department of Finance

Herbert M. Kaufman<br>Chair<br>(BAC 519) 602/965-3131

## PROFESSORS

COLES, JOEHNK, KAUFMAN, POE, SMITH, SUSHKA

## ASSOCIATE PROFESSORS

BESSEMBINDER, BOOTH, CESTA, CHAN, GALLINGER, HERTZEL, HOFFMEISTER, MARTIN, WILT

## ASSISTANT PROFESSOR LEMMON <br> PROFESSORS EMERITI <br> ANDERSON, DAUTEN, NELSON, STEVENSON, TENNEY

The study of finance prepares students to understand the financial implications inherent in virtually all business decisions. Students majoring in Finance are prepared for entry-level careers in corporate management, depository institutions, investment management, and financial services. The
finance curriculum emphasizes financial markets, evaluation of investments, and efficient allocation of resources.

The major in Finance consists of 18 semester hours. The following courses must be included in the major:

| ACC | 315 | Financial Accounting and Reporting |
| :---: | :---: | :---: |
| FIN | 331 | Financial Markets and Institutions |
| FIN | 361 | Managerial Finance |
| FIN | 421 | Security Analysis and |
|  |  | Portfolio Management |

Two additional 400-level FIN courses ....... 6
As part of the requirements, all Finance majors must complete ACC 250 Introductory Accounting Lab (1). Finance majors are strongly advised to take ACC 316 Management Uses of Accounting (3).

ACC 250 must be completed before taking ACC 315. ACC 315 must be completed before taking FIN 331 and 361 and 400-level FIN courses.

## Major Proficiency Requirements.

Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below "C" in any course in the major, this course must be repeated. If a second grade below " $C$ " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional up-per-division courses in that major.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements.
See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## FINANCE

## FIN 251 Principles of Personal Invest-

 ments. (3) NInvestment concepts for individual investors, fundamentals of investment techniques, and principles of sound investment. For nonmajors. Course may be used only for elective credit by College of Business students.
300 Fundamentals of Finance. (3) F, S, SS Theory and problems in financial management of business enterprises. Prerequisites: ACC 240; ECN 112; QBA 221.
331 Financial Markets and Institutions. (3) F, S
Analysis of financial markets and intermediaries. Theory of financial intermediation, interest rate theory, money and capital market instruments, and government regulation. Prerequisite: grade of "C" or better in FIN 300.
361 Managerial Finance. (3) F, S
Theories and problems in resource allocation, cost of capital, CAPM and capital budgeting, asset valuation, capital structure, and financing policy. Prerequisite: grade of "C" or better in FIN 300.
421 Security Analysis and Portfolio Management. (3) F, S
Security analysis theory and practice. Selection and management of financial asset portfolios. Securities markets and portfolio risk-return analysis. Prerequisites: ACC 315; FIN 331,361 ; professional program business student.
427 Speculative Securities. (3) A
Study of stock options, index options, convertible securities, financial futures, warrants, subscription rights, and arbitrage pricing theory. Prerequisites: FIN 421; professional program business student.
431 Management of Financial Institutions. (3) A

Asset/liability and capital management in financial institutions. Influence of market factors and regulatory agencies. Emphasis on com-
mercial banks. Prerequisites: ACC 315; FIN 331, 361; professional program business student.
451 Working Capital Management. (3) N Analysis of short-term profitability and liquidity. Emphasis on managing cash, accounts receivable, inventory, and current liabilities. Prerequisites: ACC 315; FIN 331, 361; professional program business student.
461 Financial Cases and Modeling. (3) A
Case-oriented capstone course in managerial finance. Contemporary issues of liquidity man agement, capital budgeting, capital structure, and financial strategy. Prerequisites: ACC 315; FIN 331, 361; professional program business student

481 Honors Seminar in Finance. (3) N Honors course covering topics that include theory and applications concerning managerial finance, investments, and financial institutions. Prerequisite: honors student or senior Finance major with minimum GPA of 3.40 .

## 502 Managerial Finance. (3) A

Theory and practice of financial decision making, including risk analysis, valuation, capital budgeting, cost of capital, and working capital management. Prerequisites: ACC 502; ECN 502; QBA 502
521 Investment Management. (3) A
Valuation of equities, fixed incomes, and options/financial futures in an individual security and portfolio context; mathematical asset allocation approaches. Not open to students with credit in FIN 421. Prerequisite: FIN 502.
531 Capital Markets and Institutions. (3) A Recent theoretical and operational developments in economic sectors affecting capital markets and institutions. Not open to students with credit in FIN 431. Prerequisite: FIN 502
551 Financial Statement Analysis. (3) A Analysis of corporations' financial statements to ascertain their financial strength and default risk. Emphasis is on studying cash flows. Lecture, cases. Prerequisites: ACC 502; FIN 502.

556 International Financial Management. (3) A

Behavior of real and nominal currency exchange rates, management of international investment portfolios, corporate exchange exposure, and hedging exchange risk. Lecture, class discussion. Prerequisite: FIN 502.
561 Financial Management Cases. (3) N Case-oriented course in applications of finance theory to management issues. Acquisition, allocation, and management of funds within the business enterprise. Working capital management, capital budgeting, capital structure, and financial strategy. Not open to students with credit in FIN 461. Prerequisite: FIN 502.

581 Applied Corporate Finance. (3) A Application of theories in corporate finance. Market efficiency, capital structure, "principalagent" theory, corporate control, dividend policy, and capital budgeting. Prerequisite: FIN 502.
781 Theory of Finance. (3) A Fundamental tools of financial economics; asset pricing, arbitrage, option pricing, capital structure, dividend policy, asymmetric information, and transaction-cost economics. Prerequisites: FIN 502, 521, 531.

791 Doctoral Seminar in Finance. (3) A
(a) Investments

Investments and market theory; efficient markets hypothesis; option and commodity markets. Prerequisite: FIN 581.
(b) Financial Institutions and Markets. Economic and monetary theory applied to financial markets and institutions; implications of financial structure for market performance and efficiency. Prerequisite: FIN 581.
(c) Financial Management. Financial theory pertaining to capital structure, dividend policy, valuation, cost of capital, and capital budgeting. Prerequisite: FIN 581.

## INSURANCE

INS 251 Principles of Insurance. (3) N Coverages available, buying methods, regulation, claims, insurance institutions, and career opportunities.

## 461 Estate Planning. (3) N

Use of life insurance with wills, trusts and buysell agreements, and tax aspects. Needs approach to estate planning. Prerequisite: professional program business student.

> School of Health Administration and Policy

Frank G. Williams Director<br>(BAC 554) 602/965-7778

## PROFESSORS

FORSYTH, JOHNSON, KIRKMAN-LIFF, KRONENFELD, SCHNELLER, WESBURY, WILLIAMS, ZUCKERMAN PROFESSOR EMERITUS EVELAND

## The Graduate Program in Health Services Administration

The School of Health Administration and Policy offers the Master of Health Services Administration (M.H.S.A.). Students enrolled in the school may earn concurrent M.H.S.A./M.B.A. degrees. The school also collaborates with the College of Law to allow students to earn concurrently the
M.H.S.A./J.D. degrees and the College of Nursing to allow students to earn concurrently the M.H.S.A. degree and the M.S. degree in Nursing with a concentration in nursing administration.

The M.H.S.A. program is designed to prepare students for entry-level management positions in health services delivery, planning/policy, and consulting organizations. Students are able to study the characteristics of managed
care and vertically integrated systems and may choose from courses focused on ambulatory settings, long-term care, and other components of the continually evolving health care system. Since so many of the features of the environment of health services are subject to periodic change (e.g., reimbursement and informations systems), substantial emphasis is on building the basic skills and analytic perspectives necessary to encounter and react to change through innovation and action.

The program has a special commitment to provide students with an understanding of the competitive nature of the health care system. Since so many of the features of the environment of health services are subject to periodic change, substantial emphasis is placed on building basic skills to understand and scan environments and to encounter and react to change through innovative action. Program students are educated to think independently and to recognize the strengths and weaknesses of group processes in decision making.

The mission of the M.H.S.A. program is to develop in its students a pattern for skill acquisition, ideology, and style that is necessary for entry into the job market and for pursuing careers as chief executive officers in target organizations. To accomplish this mission, the curriculum provides

1. the skills of understanding, analysis, and application that are essential to effective health care administration;
2. internship, residency, and project experiences that bridge the gap between theory and practice; and
3. opportunities to interact with practitioners, both in the classroom and in structured field experiences.

## HEALTH SERVICES ADMINISTRATION

HSA 473 Comparative Health Systems. (3) A
Comparison of health care financing and delivery in industrialized countries; covers insurance, hospital management and physician payment. Lecture, discussion. Cross-listed as HSA 573.
494 Special Topics in Health Administration. (3) A
Seminar topics, including comparative health care systems, ambulatory care administration, behavioral health, long term care, and health economics. Prerequisite: instructor approval.
502 Health Care Organization. (3) A Concepts, structures, functions, and values which characterize contemporary health care systems in the United States.

505 Community Health Care Perspectives. (3) A

Epidemiological, sociological and political perspectives, and techniques for analyzing health problems and responding to health care needs in communities. Prerequisite: HSA 502.

## 512 Health Care Economics. (3) A

Economics of production and distribution of health care services, with special emphasis on the impact of regulation, competition, and economic incentives. Prerequisite: HSA 502.
520 Health Care Organizational Structure and Policy. (3) A
Functional relationships among managerial elements of health care institutions with major focus on hospital governance and policy dynamics. Prerequisite: HSA 502.
522 Health Care Management Systems. (3) A
Systems concepts, quantitative methods, and information systems applied to management problems in health institutions and community health planning. Prerequisites: HSA 505; QBA 502.

532 Financial Management of Health Services. (3) A
Acquisition, allocation, and management of financial resources within the health care enterprise. Budgeting, cost analysis, financial planning, and internal controls. Prerequisites: ACC 503; FIN 502; HSA 502.
542 Health Care Jurisprudence. (3) A
Legal aspects of health care delivery for hospital and health services administration. Legal responsibilities of the hospital administrator and staff. Prerequisites: HSA 505, 520.
571 Ambulatory Care Management. (3) A The evolution, planning, and management of multispecialty group practices, health maintenance organizations, and other alternative delivery systems. Prerequisite: HSA 502.
573 Comparative Health Systems (3) A
Comparison of health care financing and delivery in industrialized countries; covers insurance, hospital management and physician payment. Lecture, discussion. Cross-listed as HSA 473
589 Integrative Seminar. (3) A
Capstone assessment of current policies, problems, and controversies across the broad spectrum of health services administration. Prerequisites: HSA 505, 520, 522, 532.

## 591 Seminar. (3) A

Seminar topics such as the following may be offered:
(a) Comparative Health Care Systems
(b) Cost Containment and Quality Assurance
(c) Behavioral Health
(d) Long-Term Care
(e) Health Care Economics
(f) Health Care Labor Law
(g) Topics in Health Services Research
(h) Managing Physicians
(i) Multihospital Systems

593 Applied Project. (3) F, S, SS
Optional on-site experience in advanced development of managerial skills in health services administration and policy. Minimum of 10 weeks. Prerequisites: 18 hours of credit toward program of study; director approval.
Omnibus Courses: See pages 44-45 for omnibus courses that may be offered.

## International Business Studies

Josef C. Brada<br>Director<br>(BAC 689) 602/965-6524

## Certificate in International Business Studies

The program of study leading to the Certificate in International Business Studies is designed to prepare students for positions with multinational firms, banks, government agencies, and international organizations. This program is not a substitute for the listed areas of business specialization; rather, the courses required for the certificate add an international dimension to the student's chosen major.

Requirements for the certificate are designed to provide an understanding of international business environments, principles and operations, to provide an awareness of global social processes and a sensitivity to foreign cultures, and to develop competence in a foreign language. These objectives are met in the following ways:

1. International Business Principles and Operations. At least 15 semester hours of approved courses in international business are required. Students must take either IBS 300 Principles of International Business or ECN/IBS 306 Survey of International Economics and the international course in their major. Other international business courses available as electives are

ECN 331 Comparative Economic
Systems SB, G ....................... 3

ECN 360 Economic
Development $S B, G$............... 3
ECN 365 Economics of Russia and Eastern Europe SB, G ............ 3
ECN 436 International Trade Theory SB, G ......................... 3
ECN 438 International Monetary Economics SB, G................... 3
ECN 494 ST: Multinational Firm in the World Economy............... 3
IBS 400 Cultural Factors in International Business $G$....... 3
MGT 459 International Management...... 3
MGT 494 ST: International Management
nt ........................... 3
MKT 435 International Marketing......... 3
MKT 494 ST: International Marketing .. 3
PLM 463 International Transportation and Logistics
2. Global and Area Studies. This requirement can be satisfied either by means of course work or through participation in approved College of Business exchange programs with foreign schools of business, or by some combination of the two. The course work option requires at least 15 semester hours of approved electives in international and area studies. A minimum of six semester hours must be in courses that provide a cross-cultural perspective from the global point of view of one or more disciplines. A minimum of nine semester hours must be in courses that provide an understanding of one region of the world.

Students who participate for two semesters in an approved College of Business exchange program with a foreign business school are deemed to have fulfilled the global and area studies requirements of the Certificate in International Business upon the successful completion of this exchange program. Students who participate in such an exchange program for one semester are deemed to have satisfied the required nine hours of area studies courses, and students who participate in such an exchange program in the summer need only complete six hours of area studies courses to meet the requirements of the certificate for area studies courses.
3. Foreign Language. Evidence of competence in a foreign language equivalent to one year of college study is required.
Since the careful planning and selection of courses are necessary to meet the requirements for the certificate without exceeding the minimum number of hours required for graduation and to take advantage of opportunities for participation in exchanges with foreign schools of business, interested students are urged to consult with an international business faculty advisor as early as possible.

## INTERNATIONAL BUSINESS STUDIES

IBS 300 Principles of International Business. (3) A
Multidisciplinary analysis of international economic and financial environment. Operations of multinational firms and their interaction with home and host societies. Prerequisite: ECN 112. General Studies: G.

306 Survey of International Economics. (3) A
Survey of international trade issues,
commercial policy, trade theory, customs
unions, and international monetary topics. Not for Economics majors. Lecture, discussion. Cross-listed as ECN 306. Prerequisites: ECN
111 or 112; 2.0 ASU GPA; junior standing.
General Studies: SB.
400 Cultural Factors in International
Business. (3) S
Anthropological perspectives on international business relations; applied principles of crosscultural communication and management; regional approaches to culture and business. Cross-listed as ASB 400. General Studies: G.

## Department of Management

William H. Glick<br>Chair<br>(BA 323) 602/965-3431

## PROFESSORS <br> BOHLANDER, CARDY, GLICK, GOMEZ-MEJIA, HOM, KINICKI, MANZ, PENLEY, REIF

ASSOCIATE PROFESSORS BRENENSTUHL, COOK, KEATS, KELLER, MOORHEAD, OLIVAS, REGER, ROBERSON, VAN HOOK

## ASSISTANT PROFESSORS

BLANCERO, WISEMAN
SENIOR LECTURERS DORAN, KREITNER, LEA
PROFESSORS EMERITI COCHRAN, DAVIS, GROSSMAN, HEIER, INSKEEP, SCHABACKER, WHITE

Management includes the functions of planning, organizing, human resource management, motivating, and controlling in the business setting; yet management is more than mere administration. Good managers make things happen through their actions within an organization and through responsible contributions to society. Good managers also understand the implications of their actions in an international environment. The Department of Management offers international business seminars for its students, and it provides students opportunities to specialize their studies in general management, managing human resources, or entrepreneurship/small business. An interactive, cooperative learning environment is stressed.

## General Management

The central purpose of management is to accomplish the organization's goals in a changing environment by successfully coordinating all types of resources. As technological change creates new opportunities for modern organizations, there are increasingly complex challenges to be met by the contemporary manager.
To prepare the student to achieve the purpose of the organization, the general management track explores the legal environment of management, the realm of human behavior in organizational contexts, the interrelation of the component functions of a business, the responsibilities of a firm in contemporary society, and an understanding of the role of the entrepreneur in the growth of businesses.

This generalist perspective addresses such current issues as diversity in the workplace, global involvements, total quality management, ethics, and other managerial emphases that promote success.

The following courses must be taken to complete this track:

| MGT 311 | Human Resource <br> Management ....................... 3 |
| :--- | :--- |
| MGT 352 | Human Behavior <br> in Organizations .................... 3 |
| MGT 434 | Social Responsibility <br> of Management..................... 3 |
| MGT 459 | International Management.... 3 |
| MGT 463 | Strategic Management............................... 3 |

## Managing Human Resources

Management has been defined as "the process of getting things done through people." The managing human resources specialty in the Department of Management introduces students to the spectrum of knowledge necessary to the effective management of people.

While this field of study develops the understanding of those students interested in the specific profession of human resource management, the courses taken in this track are of particular value to students interested in the broader application of managing people in various job functions and in diverse organizations.
Students taking these courses are exposed to topics such as workforce diversity; employee motivation; leader-
ship; the recruitment, selection, and training of employees; performance appraisal; employee discipline; conflict handling; team building; employeemanagement relations; and the legal environment surrounding the employment relationship.

Course work extends beyond the traditional lecture format to include case studies, group projects, and experiential exercises. The following courses must be taken to complete the managing human resources track:

MGT $311 \begin{aligned} & \text { Human Resource } \\ & \text { Management ........................ } 3\end{aligned}$
MGT 352 Human Behavior in
OTG 413 Organizations ........................... 3
MGT 423 Employee-Management Relations.............................. 3
MGT 463 Strategic Management ........... 3
MGT elective............................................ 3

## Entrepreneurship/Small Business

The wealth of a nation depends upon the innovativeness of its people and the spirit of entrepreneurship.

To launch and manage a successful new business venture, the entrepreneur must develop a relative mastery of a variety of skills cutting across numerous functional areas. In particular, this track provides an understanding of the new business development and strategic planning processes, motivational management, marketing strategy, financial management, and controls. Course work includes not only lecture material but involves students in case studies, group projects, the writing of business plans, and experience consulting with small business owners. The following courses must be taken to complete this track:

MGT $311 \begin{array}{ll}\text { Human Resource } \\ \text { Management ......................... } 3\end{array}$
MGT $352 \begin{aligned} & \text { Human Behavior in } \\ & \text { Organizations ....................... } 3\end{aligned}$
MGT 440 Entrepreneurship ............................. 3
MGT 441 Venture Design and Development ........................ 3
MGT 463 Strategic Management ........... 3
MGT elective. . .3

Major Proficiency Requirements.
Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade be-
low " C " in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in that major.

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements.
See pages 66-70 for university graduation requirements and pages 226-227 for college requirements.

## MANAGEMENT

## MGT 301 Management and Organization

Behavior. (3) F, S, SS
Administrative, organizational, and behavioral theories and functions of management, contributing to the effective and efficient accomplishment of organizational objectives. Prerequisites: 1 psychology (social and behavioral) course and 1 sociology course.
311 Human Resource Management. (3) F, S, SS
Human resource planning, staffing, training and development, compensation, appraisal, and labor relations. Prerequisite: MGT 301.
352 Human Behavior in Organizations. (3) F, S, SS
Human aspects of business as distinguished from economic and technical aspects and how they influence efficiency, morale, and management practice. Prerequisite: MGT 301.
413 Compensation Management. (3) A Establishing base and incentive pay with job analysis, job evaluation, and wage surveys; performance appraisal; conformance to compensation laws. Prerequisites: MGT 311; professional program business student.
422 Training and Development. (3) N Learning theory, orientation and basic level training, management development, resource materials and methods. Prerequisites: MGT 311; professional program business student.
423 Employee-Management Relations. (3) F, S
Employment relationship in union/nonunion setting. Employee-management rights/responsibilities, complaint administration, negotiations, union structure, and mock government negotiations.
424 Employee Selection and Appraisal. (3) F, S
Concepts and methods of personnel selection and performance appraisal. Includes job analysis, measurement, and legal issues. Experiential exercises emphasized. Prerequisite: MGT 311.

433 Management Decision Analysis. (3) F, S
Decision-making concepts and methods in the private and public sectors and their application to organizational problems. Understanding of individual and group decision making. Prerequisites: MGT 301; professional program business student.
434 Social Responsibility of Management. (3) F, S

Relationship of business to the social system and its environment. Criteria for appraising management decisions. Managers as change agents. Prerequisites: MGT 301; professional program business student.
440 Entrepreneurship. (3) A
Opportunities, risks, and problems associated with small business development and operation.
441 Venture Design and Development. (3) N
Analysis, design, and development of a business plan for a new venture. Prerequisite: ACC 240.
442 Small Business Management. (3) N Students, acting as management consultants, apply business principles and make recommendations to small businesses while learning to manage small firms. Prerequisite: business core except MGT 463.
447 Management and the Impact of Technology. (3) N
The impact of technology on strategic planning and human resources management in business organizations.

## 452 Organizational Behavior Applications.

(3) A

The complex set of behavioral forces and relationships that influence organizational effectiveness. Intervention strategies and application skills. Prerequisites: MGT 352; professional program business student.
459 International Management. (3) A Concepts and practices of multinational and foreign firms. Objectives, strategies, policies, and organizational structures for operating in various environments. Prerequisite: MGT 301.
463 Strategic Management. (3) F, S, SS Strategic formulation and administration of the total organization, including integrative analysis and strategic planning. To be taken last semester of senior year. Prerequisites:
completion of 108 hours, including all other business administration core requirements; professional program business student. General Studies: L2.
468 Management Systems. (3) F, S
Systems theory and practice applied to organization process and research. Organizations seen as open systems interacting with changing environments. Prerequisite: MGT 301.
494 Special Topics. (3) N
Chosen from topics in human resources, strategic management, and international management, including seminars in international management in Asia or Europe.
502 Organization Theory and Behavior. (3) F, S
Important concepts and applications in management including motivation, leadership, group dynamics, organization design, deci-sion-making, communication, and organization change. Prerequisites: calculus; computer literacy; graduate degree program student.
503 Complex Organizations. (3) N
Concepts and applications in macro organization theory. Topics include organization structure, strategic choice, culture, boundary spanning, effectiveness, and different perspectives of interorganizational relations.
504 Competitive Strategy. (3) N
Industry, competitor, and firm strategic positioning analysis aimed at gaining sustainable competitive advantage. Lecture, discussion. Prerequisites: ECN 502, FIN 502, MGT 502, MKT 502.
520 Problems in Personnel Management (3) $A$

Selecting, developing, maintaining, and utilizing a competent labor force. Case studies of personnel problems. Preparation of a written personnel program.
522 Labor Relations and Public Policy. (3) A
State and federal legislation. Recent decisions of courts and labor boards. Legal rights and duties of employers, unions, and the public. 559 International Comparative Management. (3) A
Analysis of comparative management practices, problems, and issues. Management strategies for the multinational organization Impact of national and cultural environments.

589 Strategic Management. (3) F, S Formulation of strategy and policy in the organization, emphasizing the integration of decisions in the functional areas. Prerequisites: ACC 503; BUS 502; CIS 502; ECN 502; FIN 502; MGT 502; MKT 502; OPM 502; QBA 502; completion of at least 36 hours of program of study credits.
591 Seminar. (3) N
Topics such as the following will be offered:
(a) Competitive Strategy
(b) Ethics
(c) Human Resources Systems
(d) Managerial Planning and Control

## 598 Special Topics. (3) N

Graduate special topics chosen from human resources, strategic management, and international management, including special topics in international management in Asia or Europe.
791 Seminar: Doctoral Seminar in Management. (3) A
Topics such as the following will be offered:
(a) Compensation
(b) Human Resource Management
(c) Organizational Behavior
(d) Organizational Theory
(e) Research Design and Methodology
(f) Strategic Management

## Department of Marketing

Michael P. Mokwa Chair
(BAC 462) 602/965-3621

## PROFESSORS

BROWN, GWINNER, HUTT, JACKSON, KUMAR, LASTOVICKA, MOKWA, OSTROM, REINGEN, SCHLACTER

## ASSOCIATE PROFESSORS

BITNER, BLASKO, GOURLEY, SINHA, STEPHENS, WALKER, WARD

## ASSISTANT PROFESSORS

 R. KLEINE, S. KLEINE
## SENIOR LECTURER SPIERS <br> PROFESSORS EMERITI BESSOM, OVERMAN, ROWE, SCHMIDT, ZACHER

Study in the field of marketing involves analysis of how businesses plan, organize, administer, and control their resources to achieve marketing objectives. Focus is placed on market forces, growth, and the survival of firms in competitive markets and on the marketing strategy and tactics of the firm. Through the proper selection of courses, a student may prepare for a career in

1. advertising;
2. general marketing management;
3. industrial marketing;
4. international marketing;
5. market research and planning;
6. promotion management;
7. retail merchandising and management;
8. selling and sales management; or
9. services marketing

The major in Marketing consists of 18 semester hours. The following 12 hours must be included:

MKT 302 Fundamentals of Marketing Management ........ 3
MKT 304 Consumer Behavior.............. 3
MKT 451 Market Research.................... 3
MKT 460 Strategic Marketing
To complete the major, students, in consultation with their faculty advisors, select six additional hours from among the following list of courses:

MKT 301 Principles of Advertising....... 3
MKT 310 Principles of Selling .............. 3
MKT 311 Creative Strategy in Marketing $\qquad$ 3

MKT 325 Public Relations in Business.... 3
MKT 371 Advertising Media .....  3
MKT 411 Sales Management. .....  .3
MKT 412 Promotion Management .....  3
MKT 424 Retail Management. ..... 3

MKT 430 Marketing for Service Industries $\qquad$
MKT 434 Industrial Marketing.............. 3
MKT 435 International Marketing......... 3
MKT 484 Internship
Major Proficiency Requirements.
Students must receive grades of "C" or better in upper-division courses for the major. If a student receives a grade below " C " in any course in the major, this course must be repeated. If a second grade below " C " is received in either an upper-division course in the major already taken or in a different upper-division course in the major, the student is no longer eligible to take additional upper-division courses in the major

Graduation Requirements. In addition to fulfilling major requirements, students seeking a degree must meet all university and college requirements. See pages 66-70 for university graduation requirements and pages 227-228 for college requirements.

## MARKETING

MKT 300 Principles of Marketing. (3) F, S, SS
Role and process of marketing within the society, economy, and business organization. Prerequisite: ECN 112.
301 Principles of Advertising. (3) F, S, SS Advertising as a communications tool in marketing and business management. Survey of market segmentation, creative strategy, media, and effectiveness measures. Prerequisite: MKT 300.
302 Fundamentals of Marketing Management. (3) F, S, SS
Marketing planning, implementation, and control by organizations, with special emphasis on identifying market opportunities and developing marketing programs. Prerequisite: MKT 300.

304 Consumer Behavior. (3) F, S, SS
Application of behavioral concepts in the analysis of consumer behavior and the use of behavioral analysis in marketing strategy formulation. Prerequisite: MKT 300.
310 Principles of Selling. (3) A
Basic principles underlying the selling process and their practical application in the sale of industrial goods, consumer goods, and intangibles. Prerequisite: MKT 300.
311 Creative Strategy in Marketing. (3) A Discussion, application and evaluation of creative concepts and strategies. Creation of a portfolio addressing distinctive advertising/ marketing problems and opportunities. Prerequisites: MKT 301; non-business majors must obtain department approval.
325 Public Relations in Business. (3) N Role of public relations in business, government, and social institutions, emphasizing policy formulation from a managerial perspective. Prerequisite: MKT 300.
371 Advertising Media. (3) A
Media strategy as an extension of marketing strategy; conceptual aspects of media planning; quantitative and qualitative analysis of media. Prerequisites: MKT 301; non-business majors must obtain departmental approval.
382 Advertising and Marketing Communication (3) F, S, SS
Introduction for non-business majors to the communication process within marketing and advertising. Creation and presentation of an ad campaign. Not open to business majors. Prerequisites: junior/senior standing; 2.00 ASU GPA.
411 Sales Management. (3) A
Application of management concepts to the administration of the sales operation. Prerequisite: MKT 302.
412 Promotion Management. (3) A Integration of the promotional activities of the firm including advertising, personal selling, public relations, and sales promotion. Prerequisite: MKT 302.
424 Retail Management. (3) A
Role of retailing in marketing. Problems and functions of retail managers within various retail institutions. Prerequisite: MKT 300.

430 Marketing For Service Industries. (3) F, S
Concepts and strategies for addressing distinctive marketing problems and opportunities in service industries. Current issues and trends in the service sector. Prerequisites: MKT 300, professional program business student.
434 Industrial Marketing. (3) A
Strategies for marketing products and services to industrial, commercial, and governmental markets. Changing industry and market structures. Prerequisite: MKT 302 or instructor approval.

## 435 International Marketing. (3) N

Analysis of marketing strategies developed by international firms to enter foreign markets and to adapt to changing international environments. Prerequisites: MKT 302 or instructor approval; professional program business student.
451 Marketing Research. (3) F, S, SS
Integrated treatment of methods of market research and analysis of market factors affecting decisions in the organization. Prerequisites: MKT 302 and QBA 221 (with grades of " C " or higher).
460 Strategic Marketing. (3) F, S, SS Policy formulation and decision making by the marketing executive. Integration of marketing programs and consideration of contemporary marketing issues. Prerequisites: MKT 302, 304, 451 (with grades of " $C$ " or higher); professional program business student.
502 Marketing Management. (3) F, S Managing the marketing function; market and environmental analysis; marketing planning, strategy, and control concepts. Development and management of marketing programs. Prerequisite: ECN 502.
520 Strategic Perspectives of Buyer Behavior. (3) N
Concepts and theories from the behavioral sciences as they relate to marketing strategy formulation. Prerequisite: MKT 502 or equivalent or instructor approval.
522 Marketing Information. (3) A
Marketing research, marketing information systems, and modern statistical techniques in marketing decision making. Prerequisite: MKT 502.

524 Services Marketing. (3) F, S
Strategies for marketing services emphasizing the distinctive challenges and approaches that make marketing of services different from marketing manufactured goods. Prerequisite: MKT 502 or equivalent.
563 Marketing Strategy. (3) A
Planning and control concepts and methods for developing and evaluating strategic policy from a marketing perspective. Prerequisite: MKT 502.
591 Seminar. (3) A
Topics such as the following will be offered:
(a) Product Strategy
(b) Channel Strategy
(c) Promotion Strategy
(d) Marketing in International Operations
(e) Advertising Strategy

