
English

Wendy K. Wilkins
Chair
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REGENTS' PROFESSOR N. DUBIE

PROFESSORS

BATAILLE, BENDER, BJORK,
BRACK, D. BRINK, J. BRINK,
BUCKINGHAM, CANDELARIA,
D'ANGELO, B. DOEBLER,
J. DOEBLER, DONELSON, EVANS,
HABERMAN, M. HARRIS, HELMS,
KEHL, LIGHTFOOT, NEY, A. NILSEN,
D. NILSEN, RIOS, SANDS, SHINN

ASSOCIATE PROFESSORS

ADAMS, BOYER, CARLSON,
J. GREEN, GUTIERREZ, JANSSEN,
JOHNSON, MAJOR, MILLER,
MORGAN, OJALA, RAMAGE,
SCHWALM, SENSIBAR, WILKINS

ASSISTANT PROFESSORS

BATES, BRAIDI, CASTLE,
COLBY, CORSE, J. DUBIE,
GOLDBERG, HORAN, MAHONEY,
G. NELSON, VANDEN HEUVEL

INSTRUCTOR

K. HARRIS

LECTURERS

COOK, OBERMEIER

PROFESSORS EMERITI

BROSE, ERNO, FISHER, M. GREEN,
HAKAC, HERMAN, MURRAY,
NEBEKER, POWERS, RANDALL,
SALERNO, SHAFER, TURNER

ENGLISH—B.A.

The program consists of 45 semester hours in English. Required courses are ENG 200, 221, 222, 312 (or 314 or 413), 341, 342, 421 (or 422), a course in English literature before 1660, a course in English literature between 1660 and 1900, a course in 20th-century British or American literature, and a course in women's literature or American ethnic literature. Twelve additional hours are free electives chosen from the department's offerings at the 200 level or above. A grade of "C" or better is required in all courses taken for the major. *No course may be used to satisfy more than one requirement.* At least 18 hours must be in upper-division courses.

MINOR IN ENGLISH

The English minor consists of 24 hours in English. Required courses are ENG 200, 221 (or 222), 312 (or 314 or 413), 341 (or 342), 421 (or 422); one upper-division course in English or American literature. Six additional hours are free electives chosen from the department's offerings at the 200 level or above. A grade of "C" or better is required in all courses taken for the minor.

SECONDARY EDUCATION— B.A.E.

English. The major teaching field consists of 42 semester hours in English. Required courses are ENG 200, 212 (or 215 or 216 or 217), 221, 222, 312 (or 314), 341, 342, 421 (or 422), 471, 480; one course in women's literature or American ethnic literature; and nine hours of electives (all chosen from English department courses), six of which must be upper division. ENG 471 and 480 must be taken before student teaching.

The minor teaching field consists of 24 semester hours. Required courses are ENG 200, 212 (or 215 or 216 or 217), 221 (or 222), 312 (or 314), 341 (or 342), 471, 480, and an additional upper-division elective in English.

These courses are also recommended for Elementary Education majors.

GRADUATE PROGRAMS

The Department of English offers programs leading to the Master of Arts degree in English (with concentrations in comparative literature, English linguistics, literature and language, and rhetoric and composition), Master of Fine Arts degree in Creative Writing (fiction, poetry, nonfiction, and screenwriting), Master of Teaching English as a Second Language degree, and Doctor of Philosophy degree in English (with numerous emphases). Consult the Graduate College for requirements.

ENGLISH

ENG 101 First-Year Composition. (3) F, S, SS
Discovering, organizing, and developing ideas in relation to the writer's purpose, subject, and audience. Emphasis on modes of written discourse and effective use of rhetorical principles. Foreign students, see ENG 107. Prerequisite: see pages 40 and 71.

102 First-Year Composition. (3) F, S, SS
Critical reading and writing; emphasis on strategies of academic discourse. Research paper required. Foreign students, see ENG 108. Prerequisite: ENG 101 with grade of "C" or better.

105 Advanced First-Year Composition. (3) F, S

A concentrated composition course for students with superior writing skills; intensive reading; research papers; logical and rhetorical effectiveness. Not open to students with credit in First-Year Composition. Prerequisite: see pages 40 and 71.

107 English for Foreign Students. (3) F, S
For students from non-English speaking countries who have studied English in their native countries, but who require practice in the idioms of English. Intensive reading, writing, and discussion. Satisfies the graduation requirement of ENG 101.

108 English for Foreign Students. (3) F, S
For foreign students; critical reading and writing; strategies of academic discourse. Research paper required. Satisfies graduation requirement of ENG 102. Prerequisite: ENG 107 with grade of "C" or better.

114 English Grammar and Usage. (3) F, S
The fundamentals of English grammar (word and phrase structure) and of English usage (punctuation, grammatical correctness).

Completion of the First-Year Composition requirement is a prerequisite for all English courses above the 100 level.

200 Critical Reading and Writing about Literature. (3) F, S

Introduction to the terminology, methods, and objectives of the study of literature, with practice in interpretation and evaluation. For English majors and minors only. *General studies: L1, HU.*

201 World Literature. (3) F

The classical and medieval periods. Selections from the great literature of the world in translation and lectures on the cultural background. *General studies: HU, H.*

202 World Literature. (3) S

The Renaissance and modern periods. Selections from the great literature of the world in translation and lectures on the cultural background. *General studies: HU, H.*

204 Introduction to Contemporary Literature. (3) F, S

Poetry, fiction, drama, and possibly other genres. Not for English majors or minors. *General studies: HU.*

210 Introduction to Creative Writing. (3) F, S

Beginning writing of poetry, fiction, and drama (both stage and screen). Separate sections for each genre. Each genre may be taken once.

212 English Prose Style. (3) N

Analysis and practice of writing in various classical and modern prose styles. Prerequisites: grade of "B" in ENG 102 and English major or approval of advisor and instructor. *General studies: L1.*

213 Introduction to the Study of Language. (3) F, S

Language as code; phonetics, phonology, morphology, and syntax; the lexicon; language acquisition; sociolinguistics.

215 Strategies of Academic Writing. (3) F, S

Advanced course in techniques of analyzing and writing academic expository prose. Writing is research based. *General studies: L1.*

216 Persuasive Writing on Public Issues. (3) F, S

Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers are research based. *General studies: L1.*

217 Personal and Exploratory Writing. (3) F, S

Using writing to explore one's self and the world one lives in; emphasis on expository writing as a means of learning. *General studies: L1.*

218 Writing about Literature. (3) F, S

Advanced writing course requiring analytical and expository essays about fiction, poetry, and drama. For non-English majors. *General studies: L1.*

221 Survey of English Literature. (3) F, S

Medieval, Renaissance, and 18th century literature. Emphasis on major writers and their works in their literary and historical contexts. *General studies: HU.*

222 Survey of English Literature. (3) F, S

Romantic, Victorian, and 20th-century literature. Emphasis on major writers and their works in their literary and historical contexts. *General studies: HU.*

260 Film Analysis. (3) N

Understanding and enjoyment of film and its correlation to literature, art, music, and other disciplines. *General studies: HU.*

A term paper or equivalent out-of-class written work is required in all upper-division (300–400 level) ENG courses.

301 Writing for the Professions. (3) F, S

Advanced practice in writing and editing expository prose. Primarily for preprofessional majors. *General studies: L1.*

303 Classical Backgrounds of English Literature. (3) N

Selected readings of Greek and Latin literature in translation, emphasizing forms, ideas, and myths, as they relate to literature in English. *General studies: HU.*

307 Utopian Literature. (3) N

Selected works from the present to the classical period, including *Walden Two*, *Walden*, *Utopia*, and *The Republic*. *General studies: HU.*

310 Intermediate Creative Writing. (3) F, S

Separate sections for fiction and poetry. May be taken once for poetry, once for fiction. Lectures, writing assignments, discussion, criticism. Prerequisite: ENG 210 or instructor approval.

312 English in Its Social Setting. (3) F, S

Introduction to the sociolinguistic study of the English language. *General studies: HU.*

314 Modern Grammar. (3) F, S

Modern descriptive models of English grammar.

321 Introduction to Shakespeare. (3) F, S

Shakespeare's major comedies, histories, and tragedies. Not for English majors or minors. *General studies: HU.*

331 American Drama. (3) A

Major works in the development of American drama from its beginnings to the present. *General studies: L2.*

332 Major American Novels. (3) A

Novels from the 19th century to the present studied in their historical and cultural contexts. Not for English majors or minors. *General studies: L2.*

333 American Ethnic Literature. (3) A

Examination of America's multiethnic identity through works of literature that depict American ethnic, gender, and class sensibilities. Lecture, discussion. *General studies: L2, C.*

341 American Literature. (3) F, S

From colonial times to the Civil War, including the growth of nationalism and romanticism. *General studies: HU.*

342 American Literature. (3) F, S

From the Civil War to the present. Development of realism, naturalism and modernism, and contemporary trends in prose and poetry. *General studies: HU.*

345 Selected Authors or Issues. (3–4) N

Different topics may be offered. Film topics with lab may carry 4 credits. Repeat credit for different topics.

352 Short Story. (3) F, S

Development of the short story as a literary form; analysis of its technique from the work of representative authors. *General studies: HU.*

353 African-American Literature: Beginnings through the Harlem Renaissance. (3) F

Thematic and cultural study of African-American literature through the Harlem Renaissance. *General studies: L2, HU, C.*

354 African-American Literature: Post-Harlem Renaissance to the Present. (3) S

Thematic and cultural study of African-American literature since the Harlem Renaissance. *General studies: L2, HU, C.*

355 History of the Drama. (3) S

Development of European drama from the Greek to the Romantic Period. *General studies: HU.*

356 Biblical Backgrounds of Literature. (3) F, S

Readings in Old and New Testaments, emphasizing ideas, literary types, and sources as they appear in literature. *General studies: HU.*

357 Introduction to Folklore. (3) N

Survey of the history, genres, and dynamics of folklore, with emphasis on oral traditions. *General studies: HU.*

359 American Indian Literatures. (3) S

Selected oral traditions of American Indians and their influences on contemporary Native American literary works. *General studies: HU, C.*

360 History of Film. (4) N

Emphasis on American film, with some study of European film. 3 hours lecture, 4 hours of screening. *General studies: HU.*

361 Silent Film. (4) F

Development of motion pictures from 1850 through 1930. 3 hours lecture, screenings. *General studies: HU.*

362 Sound Film Genres. (4) S

Examination of the Western, the horror film, the comedy, and other genres. 3 hours lecture, screenings. *General studies: HU.*

363 Chicano Literature. (3) F

Development of Chicano literature; study of genres and themes; attention to literary antecedents. *General studies: C.*

English majors and minors are expected to have completed ENG 200 before taking 400-level literature courses.

400 History of Literary Criticism. (3) S

Major critics and critical traditions in the western world. Prerequisite: 6 hours of literature or instructor approval. *General studies: HU.*

405 Style and Stylistics. (3) N

Linguistic, rhetorical, and literary approaches to the analysis of style in poetry, fiction, and other forms of written discourse.

408 Advanced Screenwriting I. (3) F

A study of the principles of dramaturgy or dramatic structure, with particular emphasis on character as the creator of events.

409 Advanced Screenwriting II. (3) S

Application of the principles taught in a complete feature-length screenplay. Prerequisite: ENG 408.

411 Advanced Creative Writing. (3) F, S

Separate poetry and fiction workshops for experienced writers, emphasizing individual style. May be taken once for poetry, once for fiction. Prerequisite: ENG 310 or instructor approval.

412 Professional Writing. (3) N

Lectures and conferences concerning techniques of writing for publication. Prerequisite: ENG 310 or instructor approval.

413 History of the English Language. (3) F, S

Development of English from the earliest times to the modern period. Prerequisite: junior standing or instructor approval. *General studies: HU.*

415 Medieval Literature. (3) F

Medieval English literature in translation, from *Beowulf* to Malory (excluding Chaucer), emphasizing cultural and intellectual backgrounds; includes continental works. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*

416 Chaucer: Canterbury Tales. (3) F

Chaucer's language, his last work, and its relationship to continental and insular traditions. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*

417 Chaucer: Troilus and Criseyde and the Minor Works. (3) S

Chaucer's language, his major poem, and his early works in their medieval context. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*

418 Renaissance Literature. (3) F

Poetry and prose, 1485–1603, excluding the drama. Humanism and major genres; More, Sidney, Spenser, and other representative writers. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*

419 English Literature in the Early 17th Century. (3) S

Prose and poetry, exclusive of Milton and the drama. Metaphysical, Cavalier, and neoclassical verse; Donne, Jonson, Bacon, and other representative writers. Prerequisite: ENG 221 or instructor approval. *General studies: L2, HU.*

421 Shakespeare I. (3) F, S

A selection of comedies, histories, and tragedies, including *Midsummer Night's Dream*, *Henry IV*, *Hamlet*, and *Macbeth*. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*

- 422 Shakespeare II.** (3) F, S
A selection of comedies, histories, and tragedies, including *Twelfth Night*, *King Lear*, *The Tempest*, and *Othello*. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*
- 423 English Drama to 1600.** (3) S '95
Drama (exclusive of Shakespeare), including Kyd, Marlowe, Greene, and Decker. Prerequisite: ENG 221 or instructor approval. *General studies: L2, HU.*
- 424 Jacobean and Caroline Drama.** (3) S '95
Drama from 1600 to 1642 (exclusive of Shakespeare), including Jonson, Chapman, Webster, and Beaumont. Prerequisite: ENG 221 or instructor approval. *General studies: L2, HU.*
- 425 Romantic Poetry.** (3) F
Poetry of Wordsworth, Coleridge, Shelley, Keats, and Byron. *General studies: HU.*
- 426 Victorian Poetry.** (3) F
Poetry of the second half of the 19th century. Special study of Tennyson, Browning, and Arnold. Prerequisite: ENG 222 or instructor approval. *General studies: L2, HU.*
- 427 Restoration and Early 18th Century.** (3) F
Writers and movements in the nondramatic literature of the Restoration and early 18th century. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*
- 428 The Later 18th Century.** (3) S
Writers, movements, and books during the second half of the 18th century. Prerequisite: ENG 221 or instructor approval. *General studies: L2, HU.*
- 429 Milton.** (3) F, S
Selected prose and poetry, emphasizing *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*
- 430 Victorian Cultural Backgrounds.** (3) N
Social, religious, and other cultural issues in prose by such writers as Carlyle, Ruskin, Darwin, Arnold, Pater, and Morris. Prerequisite: ENG 222 or instructor approval. *General studies: L2, HU.*
- 435 19th-Century American Poetry.** (3) S
Themes and developments in American poetry to 1900, including Poe, Whitman, and Dickinson. *General studies: HU.*
- 439 Restoration and 18th-Century Drama.** (3) S '95
English drama 1600–1800. Prerequisite: ENG 221 or instructor approval. *General studies: HU.*
- 440 American Literature to 1815.** (3) N
Thought and expression from the time of the first English-speaking colonies to 1815. *General studies: HU.*
- 441 20th-Century American Drama.** (3) N
American drama since World War I, especially experimental techniques. *General studies: HU.*
- 442 20th-Century British and Irish Poetry.** (3) F
Theory and practice of poetry since 1900. Prerequisite: ENG 222 or instructor approval.
- 443 American Poetry, 1900–1945.** (3) F
Developments in theory and practice of major poets. *General studies: HU.*
- 444 American Romanticism, 1830–1860, I.** (3) F
Cultural expression in works of representative writers. Emphasis on poetry, essay, and autobiography. *General studies: HU.*
- 445 American Romanticism, 1830–1860, II.** (3) S
Development of psychological, analytical, and tragic themes in works of representative writers. Emphasis on fiction and criticism.
- 446 American Realism, 1860–1900.** (3) S
Writers and influences that shaped the development of literary realism. *General studies: L2, HU.*
- 448 20th-Century British and Irish Novel.** (3) S
Theory and practice of the novel since 1900. Prerequisite: ENG 222 or instructor approval. *General studies: HU.*
- 451 The Novel to Jane Austen.** (3) F
From origins of prose fiction through the 18th century. *General studies: HU, H.*
- 452 The 19th-Century Novel.** (3) S
From Scott to Conrad. *General studies: HU.*
- 453 The American Novel to 1900.** (3) F
The rise and development of the novel to Dreiser. *General studies: HU.*
- 454 The American Novel, 1900–1945.** (3) F
Developments in theory and practice of major novelists. *General studies: HU.*
- 455 The Form of Verse: Theory and Practice.** (3) N
Types, history, criticism, and schools of theory of metrical form. Analysis of lyric, narrative, and dramatic poetry.
- 457 American Poetry Since 1945.** (3) S
Major American poets of the period. Developments in theory and practice. *General studies: HU.*
- 458 American Novel Since 1945.** (3) S
Major novelists of the period. Developments in theory and practice. *General studies: L2, HU.*
- 460 Western American Literature.** (3) S
Critical examination of ideas and traditions of the literature of the western United States, including the novel. *General studies: HU.*
- 461 Women and Literature.** (3) N
Selected topics in literature by or about women. May be repeated for credit when topics vary. *General studies: HU.*
- 462 20th-Century Women Authors.** (3) F
Critical examination of literature by 20th-century women writers. May be repeated for credit when topics vary. *General studies: HU.*
- 463 European Drama from Ibsen to 1914.** (3) N
Chief continental and British dramatists of the period, emphasizing the beginnings and development of realism. *General studies: HU.*
- 464 European Drama from 1914 to the Present.** (3) N
Chief continental and British dramatists of the period, emphasizing experimental techniques. *General studies: HU.*
- 471 Literature for Adolescents.** (3) F, S
Prose and poetry that meet the interests and capabilities of junior high and high school students. Recent literature stressed. A passing grade of at least "C" required before students are permitted to student teach in English. *General studies: HU.*
- 480 Methods of Teaching English.** (3) F, S
Methods of instruction, organization, and presentation of appropriate content in English. A passing grade of at least "C" required before students are permitted to student teach in English. Prerequisite: ENG 312 or 314 or 413.
- 500 Research Methods.** (3) F
Methodology and resource materials for research. Analysis of criticism and scholarship, including evaluation of sources.
- 501 Introduction to Comparative Literature.** (3) N
Problems, methods, and principles, illustrated by selected critical essays and literary texts.
- 502 Contemporary Critical Theory.** (3) F
An advanced survey of major schools of 20th-century literary and critical theory. Lecture, discussion. Cross-listed as HUM 549.
- 507 Old English.** (3) F
Elements of Old English grammar with selected readings.
- 508 Old English Literature.** (3) N
Intensive literary, linguistic, and cultural study of Old English literature. May be repeated for credit when topics vary. Prerequisite: ENG 507.
- 509 Middle English.** (3) S
A study of the principal dialects of the language with selected readings. Prerequisite: graduate standing.
- 512 The Teaching of Composition.** (3) N
The theory and practice of teaching writing at all levels. Emphasis on current research. Prerequisites: teaching experience; instructor approval.
- 515 Middle English Literature.** (3) N
English literature from the 12th through the 15th centuries, exclusive of Chaucer. Prerequisite: ENG 509 or instructor approval.
- 517 Contemporary Rhetorical Theory.** (3) F
Investigation of the work of such important rhetorical theorists as Burke, Toulmin, Perelman, Gates, and Cixous. Seminar.
- 520 Renaissance Literature.** (3) S
Poetry and prose of the English Renaissance, excluding drama.
- 521 Shakespeare.** (3) F, S
A selection of comedies, histories, and tragedies presented in the context of literary history and critical theories, with an emphasis on classical and medieval backgrounds.
- 525 American Literary Criticism.** (3) N
Analysis and discussion of leading historical and critical interpretations of American literature from the beginnings to the present.
- 530 Classical Rhetoric and Written Composition.** (3) F '95
Relationship of major texts in classical rhetoric to developments in composition theory, literary theory, and practice through the 19th century.
- 531 Rhetorical Theory and Literary Criticism.** (3) S '95
Intensive study of major rhetorical theorists of the 20th century in such areas as literary criticism, discourse theory, and composition theory.
- 532 Composition Theory.** (3) N
Intensive study in the rhetorical categories of invention, arrangement, style, aims, modes, and forms of written discourse.
- 545 Studies in English Literature.** (3) N
This course offers selected authors or issues and may be repeated for credit.
- 547 Studies in American Literature.** (3) N
This course offers selected authors or issues and may be repeated for credit.
- 549 Studies in Comparative Literature.** (3) N
This course offers selected authors or issues and may be repeated for credit.

550 Contemporary Comparative Literature. (3) F

Comparative studies in modern literature in English and other literatures in translation. May be repeated for credit when content varies.

571 Advanced Study in Literature for Adolescents. (3) N

History and criticism of adolescent literature. Prerequisite: ENG 471 or instructor approval.

572 Theories Underlying the Acquisition of English as a Second Language. (3) F

Introduction to theories of language acquisition, including the linguistic, cognitive, affective, and sociocultural aspects of these theories.

573 Censorship and Literature. (3) N

The history of censorship, primarily in the United States, and significant court decisions that affected writers and books.

574 The Teaching of English as a Second Language. (3) S

Introduction to the methods of teaching English as a second language, language teaching trends, practical applications, and the teaching of different skills. Prerequisite: ENG 572 or instructor approval.

575 Advanced Studies in the Teaching of English as a Second Language. (3) F

Current research issues in the teaching and learning of English as a second language. Prerequisite: ENG 572 or instructor approval.

576 Sociolinguistic Aspects of Second Language Acquisition. (3) N

Nature of language and interlanguage variation; instructional implications of cultural patterns of verbal and nonverbal communication.

591 Seminar. (3) F, S

Selected topics regularly offered in the various areas of English studies.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

LINGUISTICS**LIN 500 Research Methods.** (3) F

Methodology and resource materials for research. Analysis of criticism and scholarship, including evaluation of sources.

505 American English. (3) F

Development of the English language in America, including a survey of geographical and social dialects.

510 English Linguistics. (3) F

Current approaches to the study of the English language.

511 Phonetics and Phonology. (3) S

Current trends in phonological theory and its basis in acoustic and articulatory phonetics. Prerequisite: ENG 510 or equivalent or instructor approval.

513 Semantics. (3) F '94

Current approaches to linguistic meaning with particular attention to English. Prerequisite: ENG 510 or equivalent or instructor approval.

514 Syntax. (3) S

The analysis of syntactic structure by contemporary theoretical models with a focus on English. Prerequisite: ENG 510 or equivalent or instructor approval.

516 Pragmatics and Discourse Theory. (3) F '95

The study of language use in context and of language structures in conversation and written text. Lecture, discussion. Prerequisite: ENG 510 or equivalent or instructor approval.

548 Studies in English Language. (3) N

This course offers selected authors or issues and may be repeated for credit.

591 Seminar. (3) F, S

Selected topics.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

HUMANITIES

For courses in humanities, see "Interdisciplinary Humanities Program," pages 121–122.

Exercise Science and Physical Education

Philip E. Martin

Interim Chair

(PEBW 201) 602/965–3591

REGENTS' PROFESSOR

D.M. LANDERS

PROFESSORS

BURKETT, CORBIN, CORDER,
DARST, KRAHENBUHL,
OSTERHOUDT, PANGRAZI, SKINNER,
STELMACH, STOCK, STONE,
J. THOMAS, WELLS

ASSOCIATE PROFESSORS

DEZELSKY, HINRICHS, MARTIN

ASSISTANT PROFESSORS

MATT, K. THOMAS, WILLIS

LECTURER

D. LANDERS

PROFESSORS EMERITI

BRYANT, DEACH, GRIER,
KAJIKAWA, KLANN, MAARSINGH,
McFARLAND, ODENKIRK, PACKER,
PITTMAN, RICHARDSON,
STEVERSON, STEWART, THOMSON,
WEGNER, WULK

EXERCISE SCIENCE/PHYSICAL EDUCATION—B.S.

The major consists of 45 semester hours, including 21 semester hours of required EPE core courses. The remaining 24 semester hours of EPE and other courses are prescribed by the specific concentration the student selects. The required EPE core courses are EPE 335, 340, 345, 352, 450, and six semester hours of EPE 110. Each EPE core course has specific prerequisite courses that must be taken before taking the respective core course. These prerequisite courses include CHM 101 (S1); MAT 117 (N1); PGS 101 (SB); ZOL 201 (S2), 202; and HIS 102 (SB, G, H)

or PHI 101 (HU). All prerequisite and EPE courses must be completed with a minimum grade of "C." The requirements for the specific concentrations are described below.

Majors must elect either the exercise and sport studies or the exercise and wellness concentration.

Exercise and Sport Studies Concentration. Candidates must complete 24 semester hours beyond the core courses in the major field, at least 12 of which must carry EPE prefixes, be upper-division courses, and concern the theoretical subjects of the core. The remaining 12 semester hours may carry either EPE prefixes or prefixes from related disciplines selected with the advice and consent of a faculty advisor. Activity courses may not be used to fulfill part of the 24-semester-hour requirement. No more than six semester hours may be in independent study courses.

Exercise and Wellness Concentration. Candidates must complete 24 semester hours beyond the required EPE core courses: EPE 320, 420, 425, six semester hours of EPE 484 Internship, and nine semester hours selected from an approved list of concentration electives that includes courses from EPE, nutrition, computer science/statistics, and business.

EXERCISE SCIENCE/PHYSICAL EDUCATION MINOR

The minor consists of the core sequence in exercise science and physical education as follows: EPE 110 (six semester hours), 335, 340, 345, 352, 450; plus all prerequisite courses.

SECONDARY EDUCATION—B.A.E.

Physical Education. Candidates for the B.A.E. are required to complete 19 semester hours in physical education beyond the required EPE core courses (EPE 110, 361, 376, 382, 480, and 483) and a four-semester professional sequence in the College of Education (32 semester hours). Entry into this degree program requires filing an application, passing scores on a Pre-Professional Skills Test (PPST), 56 semester hours of completed university study, and a minimum GPA of 2.50. See the "College of Education" section for additional requirements.

GRADUATE PROGRAMS

The Department of Exercise Science and Physical Education offers a program leading to the Master of Science degree in Exercise Science/Physical Education. The department also participates with the Graduate College in the program leading to the Doctor of Philosophy degree in Exercise Science and with the College of Education and the Graduate College in the program leading to the Doctor of Philosophy degree in Curriculum and Instruction with concentrations in exercise and wellness education and in physical education. Consult the *Graduate Catalog* for requirements.

HEALTH SCIENCE

HES 100 Introduction to Health and Wellness. (3) F, S, SS
Current concepts of health and wellness. Cross-listed as EPE 100.

305 Substance Abuse. (3) F
General properties, principles of action, and behavioral effects of psychoactive drugs. Focuses on how substances affect health of humans.

382 Introduction to Public Health. (3) N
Public and community health is examined, including governmental, voluntary, and community agency activities that promote health among populations.

505 Drug Dependency: Perspectives and Approaches. (3) S
Classification of mood-modifying substances in terms of effects. Motivational and social forces contributing to the dynamics of the problem; control and treatment.

Students who satisfactorily complete selected HES 494 courses are eligible to qualify for a certificate of accomplishment from the Centers for Disease Control, U.S. Department of Health and Human Services.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

EXERCISE SCIENCE/ PHYSICAL EDUCATION

A \$5.00 towel and locker fee is required each semester by students using towel and locker facilities for physical education classes and intramural activities.

Physical education activity classes (EPE 105, 205, 305, 310) may not be taken for audit. Excessive absences and/or tardiness are considered disruptive behavior.

EPE 100 Introduction to Health and Wellness. (3) F, S, SS
Current concepts of health and wellness. Cross-listed as HES 100.

105 Physical Education Activity. (1) F, S, SS
Beginning instruction in a wide variety of sports such as aerobics, aquatics, racquet sports, physical conditioning, and golf. 3 hours a week. "Y" grade only. May be repeated.

110 Movement Analysis Laboratory. (1–2) F, S, SS
Practical application of biomechanical, physiological, psychological, and learning principles in the analysis of skill acquisition and performance. Prerequisites: ESPE major; EPE 105 proficiency.

205 Physical Education Activity. (1) F, S, SS
Intermediate levels. Continuation of EPE 105. 3 hours a week. May be repeated for credit.

283 Prevention and Care of Athletic Injuries. (3) F
Taping, injury recognition, emergency care, and observation procedures in athletic training. Prerequisites: ZOL 201, 202.

290 Sports Officiating. (3) F
Rules and mechanics of officiating used in football, basketball, and volleyball.

291 Theory of Coaching. (3) F, S
Theory of coaching competitive sports. Prerequisite: ESPE major.

292 Sports Officiating. (3) S
Rules and mechanics of officiating used in softball (slow and fast pitch), baseball, and track and field.

305 Physical Education Activity. (1) F, S, SS
Advanced levels. Continuation of EPE 205, with instructor's approval. 3 hours a week. May be repeated.

310 Collegiate Sports. (1) F, S
Participation in men's or women's intercollegiate competition. May be repeated for 4 credits, 1 per year. "Y/E" grade.

320 Fitness and Wellness Management. (3) S
Principles of planning, organizing, promoting, and managing fitness and wellness programs. For majors only.

325 Fitness for Life. (3) F, S
Physical fitness and benefits of exercise, with emphasis on self evaluation and personalized program planning for a lifetime.

335 Biomechanics. (3) F, S, SS
Basic mechanical and anatomical principles applied to human movement. Emphasis is placed on kinematic and kinetic concepts. Prerequisites: MAT 117; ZOL 201.

340 Physiology of Exercise. (3) F, S, SS
Physiological mechanisms of acute responses and chronic adaptations to exercise. Prerequisites: CHM 101; ZOL 202.

345 Motor and Developmental Learning. (3) F, S, SS
Principles of motor skill acquisition across the lifespan, focusing on the learner and the learning environment. Prerequisites: PGS 101; ZOL 201.

348 Psychological Skills for Optimal Performance. (3) F, S, SS
Application of psychological techniques and their use to improve effectiveness and performance in sport and related areas.

352 Psychosocial Aspects of Physical Activity. (3) F, S, SS
Interrelationships between physical activity and psychosocial variables, including socialization, team-dynamics, cultural values, anxiety-aggression, and motivation. Prerequisite: PGS 101.

361 Physical Education in the Secondary School. (3) F, S
Current trends and theories, such as elective programs, coed classes, legal issues, contract teaching, curriculum, and administration.

370 Advanced First Aid. (3) N
Assessment, management, treatment of wounds, injuries, shock, poisoning, burns, sudden illness, emergency rescue, and cardiopulmonary resuscitation. Lecture, lab.

376 Physical Education for the Elementary School. (3) F, S
Scope and values of physical education in the elementary school. Methods, materials, and practice in teaching activities for primary, intermediate, and upper grades.

382 Physical Education for the Atypical Student. (3) F, S, SS
Survey course of handicapping conditions and adapting activities to meet the needs of the handicapped. Prerequisite: EPE 335 or instructor approval.

412 Biomechanics of the Skeletal System. (3) F
Biomechanics of tissues, structures, and major joints of the musculoskeletal system. Discussion of injury mechanisms. Lecture, discussion, some labs. Prerequisite: EPE 335 or instructor approval.

420 Exercise Testing. (3) F
Theoretical basis and practical application of screening, exercise testing, estimates of energy expenditure, and interpretation of results. Prerequisite: EPE 340.

425 Exercise Prescription. (3) S
Theoretical bases for and application of general principles of exercise prescription to various ages, fitness levels, and health states. Prerequisite: EPE 420.

441 Physiology of Women in Sport. (3) S
Physiological aspects of women engaging in physical activity. Factors affecting performance and health throughout life will be emphasized. *General studies: L2.*

448 Applied Sport Psychology. (3) F, SS
Psychological theories and techniques applied to a sport to enhance the performance and personal growth of athletes and coaches. Lecture, discussion. Prerequisites: EPE 345 and 352 or equivalents. *General studies: L2.*

450 History and Philosophy of Sport. (3) F, S, SS
Nature, purpose, and development of modern sporting and related activity. Prerequisite: HIS 102 or PHI 101.

480 Methods of Teaching Physical Education. (3) F, S
Methods of instruction, organization, and presentation of appropriate content in elementary and secondary physical education. Concurrent with student teaching or permission of instructor.

483 Evaluation in Physical Education. (3) F, S, SS
Analysis and construction of tests. Statistics as applied to tests and measurement in school-based and nonschool-based settings. Prerequisite: MAT 117.

485 Advanced Techniques of Athletic Training. (3) S
An advanced course in athletic training designed for students seeking NATA certification. Emphasis on therapeutic modalities and rehabilitation procedures. Prerequisites: EPE 283, 370; CPR certification.

500 Research Methods. (3) F
An introduction to the basic aspects of research, including problem selection, literature review, instrumentation, data handling, methodology, and the writing of research reports and articles.

501 Research Statistics. (3) S

Statistical procedures; sampling techniques; exercise testing, exercise prescription, hypothesis testing, and experimental designs as they relate to research publications.

505 Applied Exercise Physiology Techniques. (3) F '95

Investigative techniques used in the applied exercise physiology laboratory. Emphasis on pulmonary function, body composition, and cardiorespiratory assessment. Lecture, lab. Prerequisite: EPE 340.

510 Introduction to Biomechanics Research Methods. (3) F

Application of mechanics to human movement analysis. Includes consideration of 2-dimensional imaging techniques, force measurement, electromyography, and data processing methods. Lecture, discussion, some labs. Prerequisite: EPE 335 or instructor approval.

520 Psychology of Exercise and Sport. (4) F

Current research in psychology of sport and exercise. Includes questionnaire, psychophysiological, and behavioral research techniques. Lecture, discussion. Prerequisites: EPE 345, 352, 500.

521 Motor Development, Control, and Learning. (4) S '95

Theory and research on motor skill acquisition, including learning/control and development (i.e., growth, children and exercise, and development learning). Lecture, discussion, some labs. Prerequisites: EPE 345, 500, 501.

530 Exercise Physiology. (3) F

Immediate and long-term adaptations to exercise with special reference to training and the role of exercise in cardiovascular health. Prerequisite: EPE 340.

534 Sports Conditioning. (3) F

Bases of sports conditioning, including aerobic and anaerobic power, strength, flexibility, and analysis of conditioning components for sports.

536 Fitness Program Development. (3) S

Planning, organization, and administration of fitness programs. Exercise testing and prescription. Programs for special groups.

540 Factors Influencing Exercise Performance. (3) S

Physiological factors that can affect the ability to exercise, and the body's response to exercise. Lecture, seminar. Prerequisite: EPE 530.

541 Physiology of Women in Sport. (3) S

Physiological aspects of women engaging in physical activity. Factors affecting performance and health throughout life will be emphasized.

542 Environmental Aspects of Human Performance. (3) N

Physiological response mechanisms to desert, arctic, mountain, and undersea environments with emphasis on exercise performance. Prerequisite: EPE 530.

550 Historical Bases of Physical Education. (3) N

Golden Age of Greece, Renaissance, and modern Europe. Cultural, economic, and educational forces that influenced the development of physical education, dance, and athletics in the United States.

555 Sport and the American Society. (3) F

Impact of sports upon the American culture, with focus on competition, economics, myths, minorities, and the Olympic syndrome.

560 Theory of Administration. (3) N

Administrative philosophies, development of concepts related to processes of administration, types of administrative behavior, tasks and responsibilities of the administrator, and the evaluation of the effectiveness of administration.

561 Administration of Athletics. (3) N

Managing an athletic program, including financing, budget policies, staging, and promotion of athletic contests, schedules, travel insurance, and current athletic trends.

562 Facility Development. (3) N

Principles, standards, personnel, designs, and equipment utilized in the planning, construction, and maintenance of indoor/outdoor facilities.

565 Improving Sport Skills. (3) SS

Factors in successful motor performance in skills used in individual, dual, and team sports.

570 Adapted Physical Education. (3) F

Contemporary adapted, developmental, remedial, and corrective physical education programs; understanding of principles, problems, and recent developments in this area.

572 Trends and Issues in Physical Education. (3) S

Literature, research, and practices in contemporary physical education, including finances, Title IX, teaching and coaching philosophies, school organization, and nonteaching physical education programs.

573 Curriculum Construction in Secondary Physical Education. (3) F

Application of principles, practices, and functional philosophies of curriculum making in physical education. Prerequisite: major in ESPE or teaching experience.

574 Analysis of Teaching Behavior in Sport and Physical Education. (3) N

Use of systematic, direct observation techniques in analyzing and evaluating instruction in sport and physical education. Lecture, lab.

575 Teaching Lifetime Fitness. (3) S

Organizing and implementing physical fitness programs in the schools with emphasis on individual problem solving.

576 Physical Education for Elementary School Children. (3) F

Current practices and research pertaining to elementary school physical education programs.

577 Movement Experiences for Preschool Children. (3) N

Movement activities for preschoolers based on the needs and characteristics of young children.

610 Advanced Topics in Biomechanics. (3) S

Three-dimensional imaging techniques, data analysis theory, and integration of biomechanics research tools; includes original research project. Lecture, discussion, some labs. Prerequisite: EPE 510 or instructor approval.

620 Developmental Motor Skill Acquisition. (3) S '95

Cognitive-motor theories of learning/performance applied to children's motor skill acquisition. Study of knowledge development and research analysis/techniques. Lecture, discussion. Prerequisite: EPE 521.

621 Motor Learning/Control. (3) F '95

Discussion of contemporary research issues in motor learning and control. Includes behavioral and neurophysiological issues. Lecture, discussion. Prerequisite: EPE 521.

622 Sport Psychology. (3) S

Contemporary research and theory as related to human performance in sport and exercise settings. Lecture, discussion. Prerequisites: EPE 501, 520.

630 Current Topics in Exercise Physiology. (3) F

Discussion of contemporary research issues in exercise physiology. Lecture, seminar. Prerequisites: EPE 505, 530, 541 (or 542).

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Family Resources and Human Development

Gary Peterson
Chair

(HEC 106) 602/965-6978

PROFESSORS

HOOVER, MORGAN,
PETERSON, ROOSA

ASSOCIATE PROFESSORS

BOULIN-JOHNSON, CHRISTOPHER,
FABES, GRIFFIN, HUGHSTON,
JOHNSTON, MANORE, C. MARTIN,
MONTE, VAUGHAN

ASSISTANT PROFESSORS

BALCAZAR, DUMKA,
PETERS, WILSON

LECTURERS

R. MARTIN, WEIGAND, ZYLLA

PROFESSORS EMERITI

BAKER, BARKLEY, BRESINA,
CREIGHTON, ELLSWORTH,
HUNTER, KAGY, O'CONNOR,
STANGE, WOOLDRIDGE

FAMILY RESOURCES AND HUMAN DEVELOPMENT—B.A. OR B.S.

For either the B.A. or B.S. degree (see "Degree Requirements," page 87), students must select one of the following three concentrations:

Family Resources and Human Development in Business with an option in food service management.

Family Studies/Child Development Human Nutrition-Dietetics with an option in (1) general dietetics or (2) human nutrition.

Family Resources and Human Development in Business

Food Service Management Option.

This option consists of 22 hours of the following required departmental courses: FON 100, 142, 341, 343, 344, 442, 445. In addition, credits are required from the following: CHM 101, 231, 235; MIC 205, 206; and a CSE, MAT, or ASM course to satisfy computer application. Additional business courses are selected in consultation with an advisor.

Family Studies/Child Development

This concentration consists of 33 hours of core family studies/child development classes. Required core courses include the following: CDE 232, 430; FAS 331, 332, 361, 431, 435, 436, 440; six hours of CDE 498 (or FAS 498); plus one of the following statistics courses: EDP 454 or PSY 230 or SOC 395.

In addition, 15 hours of electives must be taken, with at least six hours from the following: CDE 337, 338, 437; FAS 330, 390, 432; either CDE or FAS 498 or 499. The remaining courses are selected in consultation with an advisor.

Human Nutrition-Dietetics

The American Dietetic Association (ADA) has approved of the dietetics concentration as meeting their Plan V requirements. Graduates of a Plan V program may apply for dietetic internships or preprofessional practice programs to establish eligibility to write the Dietetic Registration examination. In addition to the required courses specified below, the following 18 hours are required by both the ADA and the Department of Family Resources and Human Development: EDP 310 or equivalent or HEE 480; MGT 301 or equivalent; MIC 205, 206; ZOL 201, 202. Additional courses required by the American Dietetic Association for completion of Plan V requirements are to be selected upon consultation with an advisor. Most of the Plan V requirements also satisfy College of Liberal Arts and Sciences graduation requirements.

There are the following 22 hours of required departmental courses: FON 142, 241, 440, 441, 442, 444; FRD 451 (maximum of three semester hours).

General Dietetics Option. Additional required departmental courses, totaling 18 hours, are FON 341, 343, 344, 445, 446, and 448.

Human Nutrition Option. An additional required departmental course, totaling three hours, is FON 446.

Family Resources and Human Development Minor

The minor in Family Resources and Human Development consists of 18 semester hours in which students must specialize in one of three emphases. These emphases consist of the following:

1. family studies/child development;
2. foods and nutrition in business; and
3. nutrition.

Each of these emphases requires that at least 12 of the 18 hours must be upper-division courses.

Specific requirements for each emphasis are as follows:

1. The family studies/child development emphasis requires that students take CDE 232, 337; FAS 331, 440. This emphasis also requires that two courses (or six semester hours) be selected from the following: CDE 430, 437, 498; FAS, 431, 432.
2. The foods and nutrition in business emphasis requires that students take FON 142, 343, 344, 442, 445; FRD 451.
3. The nutrition emphasis requires that students take FON 241, 440, 441, 444 (please note that FON 440, 441, and 444 have prerequisites). This emphasis also requires that two courses (or six semester hours) be selected from the following: FON 446, 448, 450, 451, 531, 532, 533 (please note that FON 446, 531, 532, and 533 have prerequisites).

SECONDARY EDUCATION—B.A.E.

Family Resources and Human Development. The major teaching field consists of 42 semester hours in family resources and human development and six hours in interior design. Major courses required are as follows: CDE 232, 337; FAS 330, 331, 354, 357, 431; FON 100, 142; FRD 451, HEE 461, 480, 481; two interior design courses; and two textile courses.

The College of Education has the following additional requirements for teacher certification: Arizona Teacher Proficiency Exam (professional knowledge only); POS 110 (or 310), 311 (or 417); 35 hours of Professional Teacher Preparation.

GRADUATE PROGRAMS

The Department of Family Resources and Human Development offers programs leading to the M.S. degree. Consult the *Graduate Catalog* for requirements.

CHILD DEVELOPMENT

CDE 232 Human Development. (3) F, S Life-span development from conception through adulthood, with emphasis on family influences. Recognition of individuality within the universal pattern of development. Prerequisites: PGS 101; SOC 101. *General studies:* SB.

337 Theory and Practice in Child Development. (3) F, S

Explores how child development theory affects practice with children and families, emphasizing development of preschool children and adult-child interaction skills. Prerequisite: CDE 232 or equivalent.

338 Child Development Practicum. (2–4) F, S

Supervised practicum in the Child Development Lab preparing students for work in childcare centers and agencies serving young children and families. Laboratory. Pre- or corequisite: CDE 337.

430 Infant/Toddler Development in the Family. (3) F

An examination of the development of infants/toddlers, the socialization processes of families, and the interactions of these processes. Prerequisite: CDE 232 or equivalent. *General studies:* SB.

437 Observational and Naturalistic Methods of Studying Children. (3) S

In-depth examination of implementing observational and naturalistic studies of children in a variety of settings. 2 hours lecture, 3 hours lab. Prerequisites: CDE 430; 6 hours of psychology. *General studies:* L2, SB.

531 Theoretical Issues in Child Development. (3) S

Major developmental theories, related research, and their application to family interaction. Prerequisites: CDE 430 and 437 (or equivalent) or instructor approval.

533 Research Issues in Child Development. (3) S

An in-depth exploration and critique of research focusing on child development in a family setting. Prerequisites: CDE 531; FRD 500.

534 Applied Child Development. (3) S

Integration of child development research and theory to understand developmental problems and their relevance to intervention strategies. Prerequisites: CDE 531; FRD 500.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

FAMILY STUDIES

FAS 301 Introduction to Parenting. (3) F, S Integrated approach to understanding parenting and parent-child interactions. Television course. Prerequisites: PGS 101; SOC 101 or equivalent.

330 Personal Growth in Human Relationships. (3) F, S Personal development and behavior as related to competency in interpersonal relationships within the family. Processes of family interaction. Prerequisites: PGS 101; SOC 101 or equivalent. *General studies: SB.*

331 Marriage and Family Relationships. (3) F, S Issues, challenges, and opportunities relating to present day marriage and family living. Factors influencing inter-relations within the family. Prerequisite: course in psychology or sociology. *General studies: SB.*

332 Human Sexuality. (3) F, S Relationship of sexuality to family life and to major societal issues. Emphasis on developing healthy, positive, and responsive ways of integrating sexual and other aspects of human living. Prerequisite: PGS 101.

354 Consumer Economics: Issues. (3) N Relationship of the consumer to the economy as a determinant of the family pattern of living. Current consumer problems and sources of protection.

357 Family Resource Management. (3) N Management as a means to realization of individual and family values and goals; creation, allocation, and use of resources. Focus on decision making. Prerequisites: PGS 101; SOC 101 or equivalent.

361 Introduction to Family/Child Research Methods. (3) S Examines basic methods applied to family/child research, critiques current research literature, and applies methods in current topics. Prerequisites: CDE 232; FAS 331. *General studies: L1.*

370 Family Ethnic and Cultural Diversity. (3) S An integrative approach to understanding historical and current issues related to the structure and internal dynamics of diverse American families. Prerequisite: PGS 101 or SOC 101.

390 Supervised Research Experience. (1-3) F, S, SS Practical, first-hand experience within current faculty research projects in family studies or child development. "Y" grade only; may be repeated for total of 6 hours. Prerequisites: FAS 361; 3.00 GPA in major; approval of supervising faculty member prior to registration.

431 Parent-Adolescent Relationships. (3) F Dynamics of the relationships between parents and adolescents. Developmental characteristics of adolescence and the corresponding adult stage. Prerequisites: CDE 232; FAS 331.

432 Family Development. (3) N Normative changes in families over time from formation until dissolution. Emphasis on the marital subsystem in middle and later years. Prerequisites: CDE 232 and FAS 331 or instructor approval.

435 Advanced Marriage and Family Relationships. (3) F Recent research, issues, and trends relating to marriage and family interaction. Influence of family composition, physical environment, family patterns, and values on family dynamics. Prerequisites: FAS 331, 361. *General studies: SB.*

436 Conceptual Frameworks in Family Studies. (3) S Approaches to study families focusing on systems, interactional, exchange, conflict, and developmental frameworks. Applications to diverse individual and family situations. Prerequisites: CDE 232; FAS 331, 361.

440 Fundamentals of Marriage and Family Therapy. (3) S Introduction to the fundamental orientations of marriage and family therapy.

454 Consumer Economics: Family Finance. (3) N Major family income and expenditure alternatives in attainment of family goals.

530 Introduction to Marriage and Family Therapy. (3) F Introduction of major marriage and family therapy orientations. Review history, theory, application, and outcome research for each orientation. Prerequisite: admission to Family Studies M.S. program or instructor approval.

531 Family Theory Development. (3) S Historical and current approaches to theory development, evaluation, and application in family studies. Prerequisite: FAS 435 or instructor approval.

535 Family Relationships in the Middle and Later Years. (3) N Developmental processes and generational relationships of the family in the middle and later stages of the family life cycle. Prerequisites: CDE 232 and FAS 331 or instructor approval.

536 Dysfunctional Marriage and Family Relationships. (3) N A critical review of current theory and empirical evidence connecting marital and family interaction patterns with aberrant behavior. Prerequisite: PGS 466 or PSY 573 or equivalent or instructor approval.

537 Interpersonal Relationships. (3) F Critical examination of current theoretical and research developments in the area of interpersonal relationships. Applications for research and intervention emphasized. Prerequisite: FAS 435 or equivalent or instructor approval.

538 Advanced Techniques in Marriage and Family Therapy. (3) N An in-depth review of assumptions and advanced techniques associated with contemporary marriage and family therapy approaches. Prerequisite: a graduate-level course in marriage and family therapy or instructor approval.

539 Research Issues in Family Interaction. (3) F Critical review of current and past research in the area of family dynamics. Emphasizes interactional processes within the family. Prerequisite: FAS 435 or equivalent or instructor approval.

540 Assessment in Marriage and Family Therapy. (3) S Instruction in the assessment and outcome evaluation of couples and families involved in marital and family therapy. Lecture, lab. Prerequisites: FRD 500 or equivalent; PSY 530; instructor approval.

551 Family Decision-Making. (3) N Theory and research focusing on centrality of decision to management in family settings. Ecological systems approach to family decision issues. Prerequisite: FAS 357 or instructor approval.

554 Family Economics. (3) N Analysis of public policy affecting family economic behavior with respect to divorce, taxation, credit, population, and other issues. Prerequisites: ECN 112; FAS 354.

580 Marriage and Family Therapy Practicum. (3) F, S Supervised clinical experience in marriage and family therapy; includes development of assessment and outcome evaluation skills. Lecture, lab. Prerequisite: instructor approval.
(a) First semester (3)
(b) Second semester (3)
(c) Third semester (3)

Omnibus Courses: See page 44 for omnibus courses that may be offered.

FOOD AND NUTRITION

FON 100 Introductory Nutrition. (3) F, S, SS Basic concepts of human nutrition. Alternative diets and how food choices affect personal health. Prerequisite: nonmajor.

142 Applied Food Principles. (3) F, S Applied scientific principles of food preparation and production. 2 hours lecture, 3 hours lab.

241 Human Nutrition. (3) F, S, SS Principles of human nutrition relative to health. Emphasis on nutrients and the factors affecting their utilization in the human body. Prerequisite: CHM 101 or equivalent.

341 Introduction to Planning Therapeutic Diets. (3) S Cultural, health, and economic aspects of diet planning. Computer and manual assessment of food composition. Review of common therapeutic diets. Prerequisites: FON 142, 241 (or equivalent).

343 Food Service Systems Procurement. (3) F Food purchasing for institutions: cost factors, food laws, quality standards, and inventory control. Field trip may be required. Prerequisites: FON 142; MAT 106.

344 Nutrition Services Management. (3) S Organization, administration, and management of food and nutrition services in hospitals and other institutions. Field trips may be included. Prerequisite: FON 343. *General studies: L1.*

440 Advanced Human Nutrition I. (3) F Metabolic reactions and interrelationships of vitamins, minerals, and water. CHM 332 recommended. Prerequisites: CHM 361; FON 241 or equivalent; ZOL 202.

441 Advanced Human Nutrition II. (3) S Metabolic reactions and interrelationships of carbohydrate, lipid, and protein. CHM 331, 332 recommended. Prerequisites: CHM 361; FON 241 or equivalent; ZOL 202. *General studies: L2.*

442 Experimental Foods. (4) F Food product development techniques, food evaluation and testing, and investigation of current research into food composition. 2 hours lecture, 6 hours lab. Prerequisites: CHM 231; FON 142.

444 Diet Therapy. (3) S

Principles of nutritional support for prevention and treatment of disease. Prerequisites: FON 241 or equivalent; ZOL 202.

445 Quantity Food Production. (3) S

Standard methods of food preparation in quantity; operation of institutional equipment and menu planning for institutions. Experience in quantity food service. 1 hour lecture, 6 hours lab. May require field trips. Prerequisites: FON 241 (or equivalent) and 343 and 344 or instructor approval.

446 Human Nutrition Assessment Lecture/Laboratory. (3) S

Clinical and biochemical evaluation of nutritional status. 2 hours lecture, 3 hours lab. Prerequisites: CHM 367; FON 440 or 441.

448 Community Nutrition. (3) F

Food-related behaviors; community organization and delivery of nutrition services; program design, implementation, and evaluation strategies; nutritional assessment of population groups. PGS 100 and SOC 101 are recommended. Prerequisite: FON 241 or equivalent.

450 Nutrition in the Life Cycle I. (3) F

Emphasis on nutritional needs and problems during pregnancy, lactation, infancy, and childhood. Prerequisite: FON 241 or equivalent.

451 Nutrition in the Life Cycle II. (3) S

The nutritional requirements and nutrition-related disorders of adolescence, middle adulthood, and later life. Prerequisite: FON 241 or equivalent.

531 Recent Developments in Nutrition. (3) N

Survey of research. Prerequisites: 1 course in advanced nutrition and 1 in biochemistry.

532 Current Research in Nutrition I. (3) S

Vitamins and minerals. Prerequisites: 1 course in advanced nutrition and 1 in biochemistry.

533 Current Research in Nutrition II. (3) F

Carbohydrates, lipids, and proteins. Prerequisites: 1 course in advanced nutrition and 1 in biochemistry.

538 Recent Developments in Foods. (3) N

Discussion and critique of current research. Prerequisite: FON 142.

540 Advanced Micronutrient Metabolism. (3) F

The metabolism of vitamins and minerals, primarily as applied to humans, with research literature emphasized. Prerequisites: 1 course in basic nutrition and 1 in biochemistry.

541 Advanced Macronutrient Metabolism. (3) S

The metabolism of protein, fat, and carbohydrate, primarily as applied to humans, with research literature emphasized. Prerequisites: 1 course in basic nutrition and 1 in biochemistry.

542 Advanced Food Product Development. (4) F

Principles of food product development and testing, including current government regulations. 2 hours lecture, 6 hours lab. Prerequisites: FON 142; inorganic chemistry.

544 Therapeutic Nutrition. (3) S

Current theories of the nutritional prevention or treatment of various diseases. Prerequisites: 1 course in basic nutrition and 1 in physiology.

545 Recent Developments in Institutional Feeding. (3) S

Current practices in institutional feeding, including supervised practicum with local quantity food operation. 1 hour lecture, 6 hours lab. Prerequisites: FON 142 and 343 and 344 or instructor approval.

546 Assessment Techniques in Nutrition Research. (2) S

Current techniques in human nutrition research. Research literature will be reviewed and critiqued. Lecture, lab. Prerequisites: CHM 361, 367; FON 440 or 441.

546L Laboratory Techniques in Nutrition Research. (1) S

Laboratory techniques required in nutrition research, including spectroscopy, chromatography, and RIA. Lab. Prerequisites: CHM 361, 367; FON 440 or 441.

548 Nutrition Program Development. (3) F

The planning, development, implementation, and evaluation of community nutrition programs, including the process of grant applications. Prerequisites: 1 course in basic nutrition and 1 in sociology.

550 Advanced Maternal and Child Nutrition. (3) F

Metabolic characteristics and nutritional needs of the pregnant woman, lactating woman, infant, and child will be reviewed in-depth. Prerequisites: 1 course in basic nutrition, physiology, and biochemistry.

551 Advanced Geriatric Nutrition. (3) S

Metabolic characteristics and nutritional requirements of the elderly will be reviewed in depth. Prerequisites: 1 course in basic nutrition, physiology, and biochemistry or instructor approval.

580 Dietetics Practicum. (3–9) F, S, SS

Structured practical experience in the Preprofessional Practice Program (AP4), supervised by practitioners with whom the student works closely. Practicum. Prerequisite: acceptance into the AP4 program.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

FAMILY RESOURCES AND HUMAN DEVELOPMENT**FRD 330 Research Issues in the Family.** (3) N

Study of current research issues in various areas that affect family life and individuals within families. Prerequisites: major; junior standing.

451 Field Experience. (1–12) N

Supervised field placement in the area of student's concentration with a community business or agency. Students must make arrangements with instructor one semester in advance of enrollment. Prerequisites: completion of 60 hours; instructor approval.

500 Research Methods. (4) F

Purposes of research. Experimental design, methods of data collection, and thesis proposal development. Includes practical application research laboratory. 3 hours lecture, 3 hours lab.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

HOME ECONOMICS EDUCATION**HEE 461 Presentations in Home Economics.** (3) F

Presentation and demonstration techniques in teaching home economics. Development of audiovisual materials for home economics content areas. Prerequisites: junior standing; instructor approval.

480 Methods of Teaching Home Economics. (3–4) F

Instruction, organization, presentation, and evaluation of subject matter in home economics. HEE students register for 4 semester hours. Dietetic students register for 3 semester hours.

481 Teaching Occupational Home Economics. (3) S

Career orientation related to home economics, cooperative work-related instruction, programs, and youth club advisement associated with secondary home economics programs. May include field trips. Prerequisite: home economics major or minor.

582 Program Planning in Home Economics. (3) S

Planning and development of home economics programs.

583 Program Evaluation in Home Economics. (3) F

Theories and processes of program evaluation. Prerequisite: HEE 582.

585 Administration and Supervision of Home Economics Education. (3) N

Development of individuals for state, city, school, and college leadership roles. Emphasis on supervision of student teachers.

586 Current Trends of Teaching Home Economics. (3) N

Focus on teaching home economics related to current issues and problems facing families and society. Prerequisite: home economics major or minor.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

TEXTILES AND CLOTHING

TXC 122 Clothing and Human Behavior. (3) F, S

Emphasizes cultural influences, human behavior, and design. *General studies: SB.*

123 Clothing Construction. (3) F, S

Construction processes related to fabrics, design, and fashions. Course may be waived on successful completion of a placement test given each semester during orientation week. 1 hour lecture, 4 hours studio.

221 Pattern Designing. (3) N

Flat patterns used to develop fundamental principles in designing individualized garments. 1 hour lecture, 4 hours studio. Prerequisites: TXC 122, 123.

223 Introduction to Textiles. (3) F, S

Basic properties, processing, end uses, and care of textile products.

318 The Clothing and Textile Industries. (3) F, S

Organization and marketing problems and practices specific to the textile and clothing industries. May include field trips. Prerequisites: ECN 112; TXC 122, 223.

323 Advanced Textiles. (3) F, S

Textile technology, fiber science, dyeing, finishing, and other topics. 2 hours lecture, 3 hours lab. May include field trips. CHM 231 recommended. Prerequisites: CHM 101; TXC 223.

325 Clothing and Textiles Industries Study Program. (2–3) N

The study and analysis of domestic and foreign textile and apparel industries. Lecture, field trip. Prerequisites: TXC 318.

327 Analysis of Ready-to-Wear. (3) F, S

Analysis and evaluation of ready-to-wear apparel, with emphasis on standards of quality for design, fabrication, production, and fit. Prerequisites: TXC 123, 223.

423 Apparel Analysis. (3) F, S

Specialized processes used with a wide variety of apparel fabrics. Interrelationships between fabric properties and apparel design. 2 hours lecture, 2 hours studio. May include field trips. Prerequisite: TXC 221.

424 History of Costume. (3) F, S

Evolution of costume from ancient Egypt to the 20th century. May include field trips. Prerequisites: an ARS course; TXC 122. *General studies: SB, H.*

425 20th-Century Apparel. (3) F, S

Cultural, decorative, and functional influences on clothing. Prerequisites: ENG 102; TXC 424. *General studies: L2.*

428 Clothing and Textile Economics. (3) N

A profile of textiles-related industries, government and labor demands, consumer expectations, and new products and markets. Prerequisites: ECN 111; 2 TXC courses.

429 Textile Analysis. (3) S

Introduction to textile testing equipment and evaluation of data. 2 hours lecture, 3 hours lab. May include field trips. Prerequisite: TXC 323.

433 Sociopsychological Aspects of Clothing. (3) N

Sociopsychological theories applied to the selection and use of clothing. May include field trip. Prerequisites: ECN 111; SOC 101; TXC 122.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Geography

Anthony J. Brazel

Chair

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PROFESSORS

BRAZEL, BURNS, COMEAUX,
GOBER, GRAF, MARCUS,
McTAGGART, PASQUALETTI

ASSOCIATE PROFESSORS

ALDRICH, ARREOLA, BALLING,
CERVENY, DORN, McHUGH,
MINGS, O'HUALLACHAIN

ASSISTANT PROFESSORS

FALL, HENKEL, KUBY

PROFESSORS EMERITI

ACKER, DURRENBERGER,
FROST, LOUNSBURY, PARKER,
SARGENT, WEIGEND

GEOGRAPHY—B.A. OR B.S.

Both programs consist of 45 semester hours. The required courses are as follows: GCU 102, 121, 495, 496; GPH 111 (or 411), 371, 491; an additional three- or four-hour course in GPH; an additional three-hour course in GCU. A further four to six hours of electives must be chosen, for a total of 36 hours in geography. The remaining nine hours are to be made up of electives from related fields of study, chosen in consultation with an advisor. At least 18 hours must be in upper-division courses.

Asian Studies Emphasis. Students majoring in Geography may elect to pursue an Asian studies emphasis combining courses from the major with selected outside courses of wholly Asian content. See "Asian Studies," page 90, for more information.

Latin American Studies Emphasis. Students majoring in Geography may elect to pursue a Latin American studies emphasis combining courses from the major with selected outside courses of wholly Latin American content. See "Latin American Studies," page 91, for more information.

SPECIAL EMPHASIS PROGRAMS

Two special emphasis programs, meteorology-climatology and urban studies, are optional. Students who wish to graduate with a B.A. or B.S. degree in Geography are not obligated to choose one of these emphases.

Meteorology-Climatology Emphasis.

The required courses are as follows: GCU 102, 121, 495, 496; GPH 111 (or 411), 213, 215, 371, 409, 410, 412 (or 413 or 414), 491. Students must also choose one other three-hour course in GCU. Also required are the following related courses: MAT 270 and 271 and 272 or 290 and 291; PHY 121, 122, 131, 132.

Urban Studies Emphasis. The required courses are as follows: GCU 102, 121, 357, 361, 444, 495, 496; GPH 111 (or 411), 371, 491. In addition, students must select two from the following list of options: GCU 351, 359 (or 360), 364, 441, 442, 453, 461; GPH 481. If GPH 481 is not selected, a further three-hour course in GPH is required. Nine hours in fields related to geography must be in urban-oriented course work.

OFFICE OF CLIMATOLOGY

Dr. R.C. Balling is director of the Office of Climatology. The office performs pure and applied climatic research and supports undergraduate and graduate students at ASU. The office maintains an extensive archive of climatic and meteorologic information on Arizona and the western United States.

SECONDARY EDUCATION—B.A.E.

Geography. The major teaching field consists of 45 semester hours, of which a minimum of 30 must be in geography and 15 in a related teaching field or fields. GCU 102, 121 and GPH 111 (or 411) are required. In conjunction with an advisor, students choose remaining credits from three groups of human, physical, and regional courses.

Social Studies. See page 153.

GRADUATE PROGRAMS

The Department of Geography offers programs leading to the M.A. and Ph.D. degrees. Consult the *Graduate Catalog* for requirements.

CULTURAL GEOGRAPHY

GCU 102 Introduction to Human Geography. (3) F, S

Systematic study of human use of the earth. Spatial organization of economic, social, political, and perceptual environments. *General studies: SB.*

121 World Geography. (4) F, S

Description and analysis of areal variations in social, economic, and political phenomena in major world regions. *General studies: SB, G.*

141 Introduction to Economic Geography. (3) F, S

Production, distribution, and consumption of various types of commodities of the world and relationships to the activities of man. *General studies: SB.*

240 Introduction to Southeast Asia. (3) F

An interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. Cross-listed as ASB 240/HIS 240/POS 240/REL 240. *General studies: G.*

253 Introduction to Cultural and Historical Geography. (3) A

Cultural patterns, including such phenomena as language, religion, and various aspects of material culture. Origins and diffusion and division of the world into cultural areas. *General studies: SB, G.*

294 Special Topics. (4) A

Topics include global awareness.

322 Geography of U.S. and Canada. (3) F

Spatial distribution of relevant physical, economic, and cultural phenomena in the United States and Canada. *General studies: SB.*

323 Geography of Latin America. (3) F

Spatial distribution of relevant physical, economic, and cultural phenomena in South, Middle, and Caribbean America. *General studies: SB, G.*

325 Geography of Europe. (3) S

Spatial distribution of relevant physical, economic, and cultural phenomena in Europe. Recommended for social studies teachers and students of European history. *General studies: SB, G.*

326 Geography of Asia. (3) S

Spatial distribution of relevant physical, economic, and cultural phenomena in Asia, excluding the U.S.S.R. *General studies: SB, G.*

327 Geography of Africa. (3) F

Spatial distribution of relevant physical, economic, and cultural phenomena in Africa. *General studies: SB, G.*

328 Geography of Middle East and North Africa. (3) A

Spatial distribution of relevant physical, economic, and cultural phenomena in the Middle East and North Africa. Prerequisite: GCU 121 or instructor approval. *General studies: SB, G.*

332 Geography of Australia and Oceania. (3) A

Spatial distribution of relevant physical, economic, and cultural phenomena in Australia, New Zealand, and Pacific Islands. *General studies: G.*

344 Geography of Hispanic Americans. (3) S

Examines the homelands, migrations, settlements, landscapes, roles, and selected cultural traditions of Hispanic Americans.

350 The Geography of World Crises. (3) F
Contemporary world crises viewed from a perspective of geographic concepts and techniques. *General studies: SB, G.*

351 Population Geography. (3) F
Demographic patterns; spatial, temporal, and structural investigation of the relationship of demographic variables to cultural, economic, and environmental factors. *General studies: SB.*

352 Political Geography. (3) S
Relationship between the socio-physical environment and the state. *General studies: SB, G.*

357 Social Geography. (3) A
Environmental perception of individuals and groups. The spatial aspect of social and physical environments is stressed. *General studies: SB.*

359 Cities of the World I. (3) F
Historical evolution of urban patterns and structures in the Middle East, India, Southeast Asia, China, Japan, and Europe. *General studies: G.*

360 Cities of the World II. (3) S
Historical evolution of urban patterns and structures in Latin America, Anglo America, Sub-Saharan Africa, and Australasia. *General studies: G.*

361 Urban Geography. (3) F, S
External spatial relations of cities, internal city structure, and spatial aspects of urban problems in various parts of the world, particularly in the United States. *General studies: SB.*

364 Geography of Energy. (3) F
Production, transportation, and consumption of energy, emphasizing the electric power industry and its environmental problems.

421 Geography of Arizona and Southwestern United States. (3) F

423 Geography of South America. (3) F
Prerequisite: GCU 323 or instructor approval. *General studies: SB, G.*

424 Geography of Mexico and Middle America. (3) S
Central America and Mexico. Prerequisite: GCU 323 or instructor approval. *General studies: SB, G.*

426 Geography of the Soviet Union. (3) S
Prerequisite: GCU 121 or instructor approval. *General studies: SB, G.*

431 Geography of the Far East. (3) N
Japan, China, and Korea, excluding the U.S.S.R. Prerequisite: GCU 326 or instructor approval.

433 Geography of Southeast Asia. (3) S
Examines the bio-physical and social features of Southeast Asian nations and peoples. Prerequisite: GCU 326 or instructor approval.

441 Economic Geography. (3) F, S
Spatial distribution of primary, secondary, and tertiary economic and production activities. Prerequisite: GCU 141 or instructor approval.

442 Geography of Transportation. (3) N
Geographic analysis of world trade routes and transportation systems. Prerequisite: GCU 141 or 441. *Graduate studies: SB.*

444 Applied Urban Geography. (3) N
Designed to prepare the student for employment in planning agencies. Includes application of urban geographic principles to present-day planning problems. Prerequisite: GCU 361.

453 Recreational Geography. (3) S
Examination of problems surrounding the organization and use of space for recreation. Introducing geographic field survey methods of data collection and analysis. Saturday field trips may be required.

455 Historical Geography of U.S. and Canada. (3) N

Changing geography of the United States and Canada from pre-Columbian times to about 1900. Emphasis on evolving economic patterns. Recommended for social studies teachers and students of American history.

461 Geographic Applications of Urban and Regional Planning. (3) N

Philosophy of the planning concept, nature, and function of planning commissions and the development of comprehensive plans. Prerequisite: GCU 361 or 444 or instructor approval.

474 Federal Public Land Policy. (3) F

Geographic aspects of federal public lands, policy, management, and issues. Emphasis on western wilderness and resource development problems.

495 Quantitative Methods in Geography. (3) S

Statistical techniques applied to the analysis of spatial distributions and relationships. Introduction to models and theory in geography. Prerequisite: MAT 119. *General studies: N2.*

496 Geographic Research Methods. (3) F, S
Scientific techniques used in geographic research. Prerequisites: GCU 495; GPH 371, 491. *General studies: L2.*

515 Human Migration. (3) F

Economic, political, social, and geographic factors underlying population movements. Migration selectivity, streams and counter-streams, labor migration, and migration decision-making. Lecture, seminar. Prerequisite: GCU 351 or instructor approval.

526 Spatial Land-Use Analysis. (3) S

Determination, classification, and analysis of spatial variations in land-use patterns. Examination of the processes affecting land use change. Prerequisite: 15 hours of geography or instructor approval.

529 Contemporary Geographic Thought. (3) N

Comparative evaluation of current philosophy concerning the nature and trends of geography. Prerequisites: 15 hours of geography; instructor approval.

585 Advanced Research Methods in Geography. (3) F

Specialized research techniques and methodologies in economic, political, or cultural geography.

591 Seminar. (1-3) F, S, SS
Selected topics in economic, political, or cultural geography. Field trips may be required.

596 History of Geographic Thought. (3) N
Development of geographic thought from Herodotus and Strabo to Humboldt and Ritter.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

PHYSICAL GEOGRAPHY

GPH 111 Introduction to Physical Geography. (4) F, S

Spatial and functional relationships among climates, landforms, soils, water, and plants. 3 hours lecture, 3 hours lab. Field trips are required. *General studies: S1, S2.*

210 Physical Environment. (3) F

Principles of physical geography relating to environmental problems pertinent to contemporary society. Pollution, maladjusted land use, and resource exploitation.

211 Landform Processes. (3) S

Geographic characteristics of landforms and earth-surface processes, emphasizing erosion, transportation, deposition, and implications for human management of the environment. Prerequisite: GPH 111. *General studies: L1.*

212 Introduction to Meteorology I. (3) F

Fundamentals of weather and climate, including basic atmospheric processes and elements. Students whose curricula require a laboratory course must also register for GPH 214. Prerequisite: GPH 111 or instructor approval. *General studies: S2 (if taken with GPH 214).*

213 Introduction to Meteorology II. (3) S

Fundamentals of meteorological analysis, including basic terminology and symbology. Prerequisite: GPH 212 or instructor approval.

214 Introduction to Meteorology Laboratory I. (1) F

Introduction to basic meteorological and climatological measurements. 3 hours lab. May be taken concurrently with GPH 212. *General studies: S2 (if taken with GPH 212).*

215 Introduction to Meteorology Laboratory II. (1) S

Basic meteorological map analysis and interpretation. 3 hours lab. May be taken concurrently with GPH 213.

271 Maps and Map Reading. (3) F

Techniques of interpretation of different types of maps and map projections; history of mapping. 2 hours lecture, 3 hours lab.

371 Cartography. (3) F, S

Basic map drafting, grid compilation, simple design, and use of cartographic instruments. 6 hours lab, field trips. Prerequisite: GPH 111.

372 Air Photo Interpretation. (3) S

Aerial photographs as a means of determining topography, vegetation, and culture; scale, use of index, vertical and oblique photographs, and stereoscopes. Prerequisites: GPH 111, 211.

373 Cartographic Design. (3) A

Optimizing the communication of spatial information and concepts. Includes cartographic decision making, symbolism, perceptions, color, topography, projections, and scale. Prerequisites: GPH 371; instructor approval.

381 Geography of Natural Resources. (3) A Nature and distribution of natural resources and the problems and principles associated with their use. *General studies: SB.*

401 Topics in Physical Geography. (1–3) A

Open to students qualified to pursue independent studies. Field trips may be required. Prerequisite: instructor approval.

405 Energy and Environment. (3) S

Sources, regulatory and technical controls, distribution, and consequences of the supply and human use of energy. Prerequisite: courses in the physical or life sciences or instructor approval.

409 Synoptic Meteorology I. (4) F '95

Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. Prerequisites: MAT 270; PHY 131, 132.

410 Synoptic Meteorology II. (4) S '96

Diagnostic techniques and synoptic forecasting. Includes techniques of weather analysis, map interpretation, and satellite and radar analysis. Prerequisite: GPH 409.

411 Physical Geography. (3) A

Introduction to physiography and the physical elements of the environment. Open only to students who have not taken GPH 111. Field trips.

412 Physical Climatology. (3) A

Physical processes in the earth-atmosphere system on regional and global scales; concepts and analysis of energy, momentum, and mass balances. Prerequisites: GPH 212 and 213 or instructor approval.

413 Meteorological Instruments and Measurement. (3) A

Design and operation of ground-base and aerological weather measurement systems. Collection, reduction, storage, retrieval, and analysis of data. Field trips are required. Prerequisites: GPH 212 and 213 or instructor approval.

414 Climate Change. (3) S

Processes that produce variations in climate over time and space. Includes changes in climate produced by human and natural forces and involves the analysis of climatic data to identify temporal and spatial variations. Prerequisite: GPH 212 or instructor approval.

418 Landforms of the Western United States. (3) F, S

Study landforms and geomorphic processes in the western United States, including lecture, topographical maps, aerial photographs, satellite imagery, and field trips. Lecture, critical inquiry, laboratory, field work. Prerequisites: GPH 211 or equivalent; completion of L1 class. *General studies: L2.*

433 Alpine and Arctic Environments. (3) F

Regional study of advantages and limitations of the natural environment upon present and future problems involving resource distribution, human activities, and regional and inter-regional adjustments. Field trips are required. Prerequisite: GPH 111 or instructor approval.

471 Geographic Information Systems. (3) A

GIS as a basis for microcomputer spatial analysis and synthesis. Includes digitizing, database organization, spatial retrieval, and graphics. Prerequisite: instructor approval.

474 Dynamic Meteorology I. (3) F '95

Large-scale atmospheric motion, kinematics, Newton's laws, wind equation, baroclinics, vorticity, and the mid-latitude depression. Prerequisites: GPH 213, 215; MAT 271; PHY 131, 132.

475 Dynamic Meteorology II. (3) S '95

Topics in climate dynamics. General circulation, numerical modeling, teleconnection phenomena, and surface-atmosphere interaction. Prerequisite: GPH 474 or instructor approval.

481 Environmental Geography. (3) S

Problems of environmental quality, including uses of spatial analysis, research design, and field work in urban and rural systems. Field trips are required. Prerequisite: instructor approval.

491 Geographic Field Methods. (6) SS

Field techniques, including use of aerial photos, large-scale maps, and fractional code system of mapping; urban and rural field analysis to be done off campus. Travel fees required. Prerequisites: GCU 102, 121; GPH 111.

511 Fluvial Processes. (3) A

Geographic aspects of fluvial geomorphology, with emphasis on river channel change, fluvial erosion, and sedimentation in the present environment. Prerequisites: GLG 101 (or GPH 111), 362 (or GPH 211).

533 Snow and Ice. (3) S

Processes, distribution, climatic interactions of snow/ice emphasizing mass balance, snow stratigraphy/metamorphism and glacier/snow-pack climatology. Lecture, field work. Prerequisite: instructor approval.

571 Computer Mapping and Graphics. (3) F

Utilization of the digital computer in analysis and mapping of geographic data. Includes plotting, surficial display, compositing, and graphics. Field trips. Prerequisites: GPH 371; instructor approval.

575 Geographic Applications of Remote Sensing. (3) S

Use of imaging and nonimaging methods of remote acquisition of data, including satellite sensors, airborne radar, multiband scanning, conventional photographic sensors, and ground-based equipment. Field trips are required. Prerequisites: GCU 585 (or GPH 491); GPH 372.

591 Seminar. (1–3) F, S

Selected topics in physical geography. Field trips may be required.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Geology

Edmund Stump
Chair

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REGENTS' PROFESSORS

BUSECK, MOORE

PROFESSORS

BURT, FINK, GREELEY, HOLLOWAY,
KNAUTH, LARIMER, LUNDIN,
RAGAN, STUMP

ASSOCIATE PROFESSORS

CHRISTENSEN, PEACOCK,
REYNOLDS, TYBURCZY, WILLIAMS

ASSISTANT PROFESSORS

GRIMM, SANDERS

PROFESSORS EMERITI

DIETZ, KRINSLEY, PÉWÉ

GEOLOGY—B.S.

The program requires 37 semester hours including the following "core courses" or their equivalents: GLG 100 (or 101 and 103), 102, 104, 310, 321, 322, 400 (two semesters), 450. In addition, three of the following four "branch courses" must be taken: GLG 335, 418, 424, 435. It is strongly recommended that the fourth branch course is also taken. Supporting

courses required in related fields are the following: CHM 113, 116; MAT 290 and 291 or MAT 270 and 271 and 272 (or 274); PHY 121, 122, 131, 132. To complete the total required hours, other courses in geology or in related fields listed as approved by the department may be taken. French, German, or Russian is strongly recommended to fulfill the foreign language requirement. See "Degree Requirements," page 87.

MINOR IN GEOLOGY

A minor in Geology is awarded to students who complete a minimum of 23 hours of Geology courses. Required courses are GLG 101, 103, 102, 104, 310, 321, 322 and 400 totaling 17 semester hours. The remaining six semester hours may be chosen among other upper-division Geology courses, except GLG 300 and 400, after consultation with a departmental advisor.

GRADUATE PROGRAMS

The Department of Geology offers programs leading to the M.S. and Ph.D. degrees. Consult the *Graduate Catalog* for requirements.

GEOLOGY

GLG 100 General Geology. (4) F, S, SS
Nonlaboratory introduction to physical and historical geology. The earth, its origin, processes that affect it, sequence of events in its evolution, and succession of life upon it. GLG 100 and 101 may not both be taken for credit. Possible field trips.

101 Introduction to Geology I (Physical). (3) F, S, SS
Basic principles of geology, geochemistry, and geophysics. Rocks, minerals, weathering, earthquakes, mountain building, volcanoes, water, and glaciers. Possible weekend field trips. *General studies: S1, S2 (if taken with GLG 103).*

102 Introduction to Geology II (Historical). (3) S
Basic principles of applied geology and the use of these principles in the interpretation of geologic history. Possible weekend field trips. Prerequisite: GLG 101. *General studies: S2 (if taken with GLG 104).*

103 Introduction to Geology I-Laboratory. (1) F, S, SS
Three hours lab, some field trips. Corequisite: GLG 101. *General studies: S1, S2 (if taken with GLG 101).*

104 Introduction to Geology II-Laboratory. (1) S
Laboratory techniques involving map interpretation, cross sections, and fossils. 3 hours lab, possible field trips. Prerequisite: GLG 103 or equivalent. Corequisite: GLG 102. *General studies: S2 (if taken with GLG 102).*

105 Introduction to Planetary Science. (3) F
Planets, asteroids, comets, and meteorites and their geological evolution, surfaces, interior, atmospheres, and exobiology. Terraforming and space colonies.

110 Environmental Geology. (3) F
Geological studies as they apply to interactions between humans and earth. Includes geological processes and hazards, resources, and global change.

111 Environmental Geology Lab. (1) F
Basic geological processes and concepts. Emphasis on geology-related environmental problems concerning Arizona. Case histories and field studies. Lab. Corequisite: GLG 110.

300 Geology of Arizona. (3) F, S
Basic and historical geology, fossils, mining, energy resources, environmental problems, landscape development, and meteorites, cast in examples from Arizona. Majors who have taken GLG 101 for credit may not enroll.

302 Man and Geologic Environment. (3) N
Geologic hazards, problems of waste disposal and land-use planning, and environmental problems related to solid earth.

304 Geology of the Grand Canyon. (2) N
Review of the discovery, history, origin, and geology of the Grand Canyon of the Colorado River in Arizona. Six-day field trip down the river (first 6 days after commencement in May) required at student's expense. Field research and term paper on trip also required.

305 Geology of the Earth, Moon, and Planets. (3) S
Geological studies of the planets and satellites through the analysis of spacecraft data and field studies. Weekend field trips. Prerequisites: GLG 100 and 101 and 105 and 300 or equivalents.

310 Structural Geology. (3) S
Geologic structures and the mechanical processes involved in their formation. 2 hours lecture, 3 hours lab. Possible field trips. Prerequisites: GLG 101; MAT 270 or 290.

321 Mineralogy. (3) F
Crystallography, crystal chemistry, and crystal physics as applied to minerals; determinative methods; origin and occurrence. Possible field trips. Prerequisite: MAT 270 or 290. Pre- or corequisite: CHM 116. Corequisite: GLG 322.

322 Mineralogy Laboratory. (2) F
Hand specimen identification, polarizing microscopy, and optical techniques. 6 hours lab. Corequisite: GLG 321.

335 Principles of Paleontology. (2) F
Emphasis on preservation, growth, species concept, and evolution as demonstrated by the fossil record. Prerequisites: GLG 102 and MAT 270 (or 290) or instructor approval.

336 Invertebrate Paleontology. (3) F
Biology, skeletal morphology, and systematics of fossil invertebrates. One or two projects emphasizing population analysis and techniques in paleontology. Lecture, 6 hours lab, possible field trips. Prerequisite: GLG 102 or instructor approval. Pre- or corequisite for Geology majors: GLG 335.

362 Geomorphology. (3) N
Land forms and processes which create and modify them. Laboratory and field study of physiographic features. 2 hours lecture, 3 hours lab, some field trips during lab, possible weekend field trips. Pre- or corequisites: GLG 101, 310, 424.

400 Geology Colloquium. (1) F, S
Presentation of recent research by faculty and guests. Written assignments required. 1 semester hour required for Geology majors; may be repeated for a total of 2 semester hours. Prerequisite: 2 courses in the department or instructor approval.

405 Geology of the Moon. (3) N
Current theories of the origin and evolution of the moon through photogeological analyses and consideration of geochemical and geophysical constraints. Possible weekend field trip. Prerequisite: GLG 105 or 305 or instructor approval.

406 Geology of Mars. (3) N
Geological evolution of Mars through analyses of spacecraft data, theoretical modelling, and study of terrestrial analogs; emphasis on current work. Possible weekend field trip. Prerequisite: GLG 105 or 305 or instructor approval.

412 Geotectonics. (3) F
Origin of continents and ocean basins. Evolution of the crust in time. Drifting, sea floor spreading, and other large-scale movements of the earth's crust. Upper mantle processes. Emphasis on current work. Prerequisite: GLG 310.

418 Geophysics. (3) F
Solid earth geophysics; geomagnetism, gravity, seismology, heat flow, emphasizing crust and upper mantle. 2 hours lecture, 3 hours lab, field trips during lab, possible weekend field trips. Prerequisites: GLG 101 and MAT 272 (or 291) and PHY 121 and 131 or instructor approval.

419 Thermal-Mechanical Processes in the Earth. (3) S
Emphasis on applied mathematical techniques, heat conduction problems in geology, thermal convection, stresses in the lithosphere, and viscoelastic processes in the Earth. Prerequisites: PHY 121, 131.

420 Volcanology. (3) A
Distribution of past and present volcanism, types of volcanic activity, mechanism of eruption, form and structure of volcanoes, and geochemistry of volcanic activity. Possible weekend field trips. Prerequisite: GLG 424.

424 Petrology-Petrography. (4) S
Theoretical and laboratory study of the origin and classification of igneous and metamorphic rocks. Hand specimen and thin-section study of rocks. 3 hours lecture, 3 hours lab. Possible weekend field trips. Prerequisites: GLG 321, 322.

435 Sedimentology. (3) S
Origin, transport, deposition, and diagenesis of sediments and sedimentary rocks. Physical analysis, hand specimen examination, and interpretation of rocks and sediments. 2 hours lecture, 3 hours lab, possible weekend field trips. Prerequisites: GLG 102, 321, 322.

436 Principles of Stratigraphy. (3) S
Principles of interpreting lithostratigraphic, magnetostratigraphic, biostratigraphic, seismostratigraphic, and chronostratigraphic units; correlation and facies relationships in stratified rocks. Applied stratigraphy project(s). Lecture, possible field trips. Prerequisites: GLG 102; instructor approval.

441 Ore Deposits. (3) N

Origin, occurrence, structure, and mineralogy of ore deposits. Possible weekend field trips. Prerequisite: GLG 424 or instructor approval.

450 Geology Field Camp. (6) SS

Geological mapping techniques on aerial photos and topographic maps. Field based with excursions. Prerequisites: GLG 310, 321.

455 Advanced Field Geology. (4) F, S

Geologic mapping in igneous, sedimentary, and metamorphic terrains of the Basin and Range province of Arizona. Weekend field trips. May be repeated for credit. Prerequisite: GLG 450 or instructor approval.

456 Cordilleran Regional Geology. (3) F

Systematic coverage through space and time of the geological development of Western North America, emphasizing the Western United States. Prerequisite: senior major or graduate student in Geology or instructor approval.

462 Environmental Geology of Cold Regions. (3) N

Geological and engineering importance of seasonal and perennially frozen ground (permafrost). Properties, distribution, and the origin of ice in the ground and its application to engineering and land utilization problems. Possible weekend field trips. Prerequisites: GLG 101 and 435 and PHY 111 and 113 or instructor approval.

481 Geochemistry. (3) F

Origin and distribution of the chemical elements. Geochemical cycles operating in the earth's atmosphere, hydrosphere, and lithosphere. Cross-listed as CHM 481. Prerequisite: CHM 341 or 441 or GLG 321.

485 Meteorites and Cosmochemistry. (3) N

Chemistry of meteorites and their relationship to the origin of the earth, solar system, and universe. Cross-listed as CHM 485.

490 Topics in Geology. (1–3) F, S, SS

Special topics in a range of fields in geology. May be repeated for credit. Prerequisite: instructor approval.

500 Geology Colloquium. (1) F, S

Presentation of recent research by faculty and invited guests. 1 semester required for all geology graduate students. May be repeated for total of 2 semesters. Research paper required. Prerequisite: instructor approval.

501 Geology of Arizona. (3) F, S

Basic and historical geology, fossils, mining, energy resources, environmental problems, landscape development, and meteorites, cast in examples from Arizona. Research paper required.

504 Geology of the Grand Canyon. (2) S

Review of the discovery, history, origin, and geology of the Grand Canyon of the Colorado River in Arizona. 6-day field trip down the river (first 6 days after commencement in May) required at student's expense. Field research and term paper on trip also required.

510 Advanced Structural Geology. (3) N

Mechanics of rock deformation, emphasizing relationship between field observation, theory, and experiment. Stress, strain, simple constitutive relationships, failure criteria, and the basis of continuum methods. Possible field trips. Prerequisites: GLG 310 and 424 or instructor approval.

520 Advanced Physical Volcanology. (2–3) A

Selected volcanologic topics, including explosive eruption processes, lava flow mechanics, and intrusive mechanisms. Field trips possible. Prerequisite: GLG 420 or instructor approval.

523 Advanced Mineralogy-Crystallography. (3) S

Crystallography, principles of X-ray and electron diffraction, defects in crystals, electron microscopy of minerals. Prerequisite: CHM 441 or GLG 321 or equivalent.

524 Advanced Igneous Petrology. (3) N

Theoretical and practical aspects of the genesis of igneous rocks. Study of selected sites. Modern laboratory techniques. 2 hours lecture, 3 hours lab, possible weekend field trips. Prerequisite: GLG 424.

525 Advanced Metamorphic Petrology. (3) N

Theoretical and laboratory study of metamorphic rocks. Processes of contact and regional metamorphism. Advanced methods and instrumentations. 2 hours lecture, 3 hours lab, possible weekend field trips. Prerequisite: GLG 424.

561 Glacial Geology. (3) N

Properties, distribution, and origin of glacial deposits, including principles of their stratigraphy and correlation. Environmental geology problems in glaciated regions. 2 hours lecture, 3 hours lab, some field trips during lab, possible weekend field trips. Prerequisite: GLG 362.

562 Quaternary Geology. (3) N

Geology of the Quaternary Period in both glaciated and unglaciated areas. Stratigraphy, correlation, and environmental application of Quaternary deposits. Special reference to the Southwest. 2 hours lecture, 3 hours lab, some field trips during lab, possible weekend field trips. Prerequisite: GLG 362 or instructor approval.

581 Isotope Geochemistry. (3) N

Geochemistry and cosmochemistry of stable and radioactive isotopes; geochronology; isotope equilibria. Cross-listed as CHM 581. Prerequisite: instructor approval.

582 Physical Geochemistry. (3) N

Application of thermodynamic and kinetic principles to geochemical processes. Prerequisite: CHM 341 or 441 or GLG 321.

583 Phase Equilibria and Geochemical Systems. (3) N

Natural reactions at high temperatures and pressures; silicate, sulfide, and oxide equilibria. Cross-listed as CHM 583. Prerequisites: GLG 582; instructor approval.

591 Seminar. (1–3) F, S, SS

Topics in a range of fields in geology. May be repeated for credit. Prerequisite: instructor approval.

598 Special Topics. (1–3) F, S, SS

Special topics in geology. May be repeated for credit. Prerequisite: instructor approval.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

History

Retha M. Warnicke

Chair

(SS 204) 602/965–5778

PROFESSORS

BURG, FUCHS, GIFFIN, IVERSON, KLEINFELD, LUCKINGHAM, MacKINNON, ROTHSCCHILD, STOWE, TAMBS, TILLMAN, TRENNERT, WARNICKE

ASSOCIATE PROFESSORS

ADELSON, BATALDEN, DELLHEIM, ESCOBAR, FULLINWIDER, GRATTON, HURTADO, KAHN, KEARNEY, ROSALES, RUSH, SIMPSON, L. SMITH, R. SMITH, SIMPSON, STONER, VANDERMEER, WARREN-FINDLEY

ASSISTANT PROFESSORS

CARROLL, GRAY, GULLETT, HALL, HENDRICKS, SOERGEL, WEINER

SENIOR INSTRUCTIONAL PROFESSIONAL

LUEY

PROFESSORS EMERITI

BARLOW, DANNENFELDT, HUBBARD, KARNES, PAULSEN, PHILLIPS, SACKS, TILDEN, WOOTTEN, YOUNG

HISTORY—B.A.

The program consists of 45 semester hours, of which 30 must be in history and 15 in related fields to be approved by the advisor in consultation with the student. Courses in related fields may also be used to satisfy general college requirements. HIS 498 Pro-Seminar is required, except for honors students, who may substitute HIS 493 Honors Thesis. At least 18 hours in history courses and six hours in the related fields must be in upper-division courses. At least six hours in history must be taken in each of two of the following areas: U.S., Latin American, British, Asian, and European history. A minimum GPA of 2.25 in the 30 hours of history courses is required. See "Degree Requirements," page 87.

HISTORY—B.S.

The program consists of 36 semester hours in history (including HIS 381 and 382) and 18 hours in closely related fields and quantitative studies, as approved by the program directors in consultation with the student. HIS 381 and 382 are required for all degree candidates and should be completed, in sequence, by the end of the junior year. Courses in related fields may also be used to satisfy general college requirements. At least 27 hours in history courses and nine hours in the related fields must be upper division. At least six hours in history must be taken in each of two of the following areas: U.S., Latin American, British, Asian, and European history. A minimum GPA of 2.25 in the 42 hours of history courses is required. Students must earn a minimum grade of “C” in HIS 381, 382, and their prerequisite, MAT 117. See “Degree Requirements,” page 87.

Asian Studies Emphasis. Students majoring in History may elect to pursue an Asian studies emphasis combining courses from the major with selected outside courses of wholly Asian content. See “Asian Studies,” page 90, for more information.

Latin American Studies Emphasis. Students majoring in History may elect to pursue a Latin American studies emphasis combining courses from the major with selected outside courses of wholly Latin American content. See “Latin American Studies,” page 91, for more information.

MINOR IN HISTORY

The History minor consists of 18 semester hours of course work, at least 12 hours of which are upper division.

SECONDARY EDUCATION—B.A.E.

History. The major teaching field consists of 42 semester hours, of which at least 30 must be in history courses. At least 18 of the history hours must be in upper-division courses. At least three semester hours must be taken in U.S. history. The remaining history and related area courses must be selected in consultation with an advisor from the Department of History. A minimum GPA of 2.25 in history courses is required for admission to practice teaching and for graduation. HIS 495 may

not be counted as part of the 42-hour requirement for the academic specialization.

The minor teaching field consists of 24 semester hours in history courses, of which at least nine must be in upper-division courses. The program must include at least three hours in U.S. history.

Social Studies. See page 153.

GRADUATE PROGRAMS

The Department of History offers programs leading to the M.A. and Ph.D. degrees. Consult the *Graduate Catalog* for requirements.

HISTORY

HIS 100 Western Civilization. (3) F, S
Traces origin and development of Western societies and institutions from the ancient world through the Middle Ages. *General studies:* SB, H.

101 Western Civilization. (3) F, S
Traces origin and development of Western societies and institutions from the Renaissance and Reformation through Age of Enlightenment. *General studies:* SB, H.

102 Western Civilization. (3) F, S
Traces origin and development of Western societies and institutions from the French Revolution to the present. *General studies:* SB, G, H.

103 The United States. (3) F, S
Growth of the Republic from colonial times through the Civil War period. *General studies:* SB, H.

104 The United States. (3) F, S
Growth of the Republic from the Civil War period to the present day. *General studies:* SB, H.

107 Introduction to Japan. (3) A
Historical survey of the people, culture, politics, and economy of Japan, supplemented by audiovisual presentations. Intended for nonmajors. *General studies:* SB, G, H.

230 American Social History. (3) F, S
American society from the colonial period to the present. Ethnicity, race, age, and sex as factors in historical experience. Lecture, discussion. *General studies:* L1, H.

240 Introduction to Southeast Asia. (3) F
An interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia. Cross-listed as ASB 240/GCU 240/POS 240/REL 240. *General studies:* G.

270 Judaism in American History. (3) N
A chronological analysis of Jews and Judaism in American history and letters. *General studies:* SB, H.

271 European Jewish History. (3) N
European Jewish experience from the Crusades to the emancipation of the Jews in the 18th and early 19th centuries.

273 American Military History. (3) F
A study of the role of the military in American life during war and peace from colonial times to the present day. 3 hours lecture/conference. *General studies:* SB, H.

294 Selected Topics in History. (3) N
A full description of topics for any semester is available in the History Department office. May be repeated for credit.

303 American Cultural History. (3) F, S
Culture in a broad connotation, including ideas, ideals, the arts, and social and economic standards from the nation's colonial background and early national period. Cross-listed as AMS 320. *General studies:* SB, H.

304 American Cultural History. (3) F, S
Culture in a broad connotation, including ideas, ideals, the arts, and social and economic standards from the age of industrialism and modern America. Cross-listed as AMS 321. *General studies:* SB, H.

305 Asian Civilizations. (3) F, S
The civilizations of China, Japan, and India to mid-17th century. *General studies:* SB, G, H.

306 Asian Civilizations. (3) F, S
The civilizations of China, Japan, and India from the mid-17th century to present. May also include Southeast Asia. *General studies:* SB, G, H.

311 Asian American Experiences: A Historical Perspective. (3) N
A survey of the history of Asian Americans in the United States since the mid-19th century. Lecture, discussion. *General studies:* C.

320 Ancient Greece. (3) A
History and civilization of the Greek world from the Bronze Age to the Roman conquest of the Hellenistic kingdoms. *General studies:* SB, H.

321 Rome. (3) A
History and civilization of Rome from the beginning of the Republic to the end of the Empire. *General studies:* SB, H.

322 The Middle Ages. (3) A
Political, socioeconomic, and cultural developments of Western Europe during the Early Middle Ages. Prerequisite: HIS 100 or instructor approval. *General studies:* SB, H.

323 The Middle Ages. (3) A
Political, socioeconomic, and cultural developments of Western Europe during the High Middle Ages. Prerequisite: HIS 100 or instructor equivalent. *General studies:* SB, H.

324 Renaissance. (3) F
Antecedents and development of the Renaissance in Italy and its spread to the rest of Europe. *General studies:* L2, SB, H.

325 Reformation. (3) S
The Protestant and Catholic Reformation in the 16th century. *General studies:* L2, SB, H.

326 Early Modern Europe. (3) A
Social, economic, cultural, and political changes in 17th-century Europe. *General studies:* SB, H.

327 Early Modern Europe. (3) A
Social, economic, cultural, and political changes in 18th-century Europe. *General studies:* SB, H.

329 19th-Century Europe. (3) A
Political, social, economic, and intellectual currents in Europe from Napoleon to 1866. *General studies:* SB, H.

330 19th-Century Europe. (3) A
Political, social, economic, and intellectual currents in Europe from 1866–1918. *General studies:* SB, H.

- 331 20th-Century Europe.** (3) N
Europe in its world setting since World War I, emphasizing major political and social issues. 1914–1945. *General studies:* SB, G, H.
- 332 20th-Century Europe.** (3) N
Europe in its world setting since World War II, emphasizing major political and social issues from 1945 to the present. *General studies:* SB, G, H.
- 333 Women and Society in Europe.** (3) N
Women's role, status, and achievements in Europe, 1750–1950. Changes in everyday life, sex roles, family patterns, work, and culture. *General studies:* L2, HU, SB, H.
- 335 Family, Class, and Society in Modern Europe.** (3) N
Family life, sex roles, work, crime, population changes, and their relationship to political, economic, and social changes. Prerequisite: upper-division standing or instructor approval. *General studies:* L2, SB, H.
- 351 England.** (3) F, S
Political, economic, and social development of the English people to the 17th century. *General studies:* SB, H.
- 352 England.** (3) F, S
Political, economic, and social development of the English people from 17th century to the present. *General studies:* SB, H.
- 357 19th-Century West.** (3) F
Social, political, and economic development of trans-Mississippi West beginning with Louisiana Purchase and ending in 1900. *General studies:* SB, H.
- 358 The West in the 20th Century.** (3) S
Role of the western states in American history since 1890 with emphasis on politics, the environment, industry and labor, and the changing position of ethnic minorities. *General studies:* SB, H.
- 362 American Indian History.** (3) F
Examination of federal Indian policy and cultural, economic, political, and social continuity and change of American Indian communities. *General studies:* SB, C, H.
- 363 African-American History I.** (3) A
The African American in American history, thought, and culture from slavery to 1865. *General studies:* SB, C, H.
- 364 African-American History II.** (3) A
The African American in American history, thought, and culture from 1865 to the present. *General studies:* SB, C, H.
- 365 Islamic Civilization.** (3) A
An interdisciplinary survey of the art, history, and religion of Islamic civilization. *General studies:* HU, G, H.
- 366 The Modern Middle East.** (3) S
Impact of the Western world upon Middle Eastern governments, religion, and society in the 19th and 20th centuries; problems of modernization and the role of the Middle East in world affairs. *General studies:* SB, G, H.
- 370 Women in U.S. History, 1600–1880.** (3) F
Examination of lives of American women and women's social organizations. *General studies:* SB, H, C.
- 371 Women in U.S. History, 1880–1980.** (3) S
Examination of lives of American women and women's social organizations. *General studies:* SB, H, C.
- 375 History and Theory.** (3) N
Historical and theoretical sources of modernity, particularly moral and cultural relativism, value-free social science, behaviorism, humanism, Marxism, and atheism.
- 380 History of the Mexican-American.** (3) A
Role of the Mexican-American in U. S. history. *General studies:* SB, H.
- 381 Quantification in History.** (3) F
Quantitative techniques, including political analysis, new economic theory, demography, and social history. Research methods in social science, including design, data collection, and computer skills. Prerequisite: MAT 117.
- 382 Historical Statistics.** (3) S
Historical data analysis, including sampling distributions, tests of hypotheses, t-tests to multiple regression, and nonparametric techniques. Prerequisite: HIS 381. *General studies:* N2.
- 383 Latin America.** (3) A
Ancient civilization, explorers and conquerors, and colonial institutions. *General studies:* SB, H.
- 384 Latin America.** (3) A
Nationalistic development of the independent republics since 1825. *General studies:* SB, H.
- 394 Selected Topics in History.** (3) N
A full description of topics for any semester is available in the History Department office. May be repeated for credit.
- 401 American Colonial History.** (3) A
Political, economic, social, and cultural history of the colonial era. Concentrates on English colonies, with some consideration of Spanish, French, and other colonial regions in North America. *General studies:* SB, H.
- 403 The American Revolution.** (3) N
Political, social, and economic development in the Revolutionary era, 1763–1789.
- 404 The Early Republic, 1789–1850.** (3) A
Political, social, economic, and cultural development of the United States from the Revolution to 1850. Prerequisite: HIS 103 or instructor approval. *General studies:* L2, SB, H.
- 406 Civil War and Reconstruction.** (3) A
Explores the causes, conduct, and consequences of the American Civil War, emphasizing politics and policy. Prerequisite: HIS 103 or instructor approval. *General studies:* L2, SB, H.
- 407 The Emergence of Modern America.** (3) A
The triumph of modern political, social, and economic structures and values, 1870–1918; role of region, religion, race, and ethnicity. *General studies:* SB, H.
- 409 Recent American History.** (3) A
The United States from 1913–1932, including Wilsonian diplomacy and the First World War, the 1920s, the origins of the Great Depression, Hoover administration. Prerequisite: HIS 104 or equivalent. *General studies:* SB, H.
- 410 Recent American History.** (3) A
The United States from 1932–1945, including the New Deal, society during the Depression, Second World War. Prerequisite: HIS 104 or equivalent. *General studies:* SB, H.
- 411 Contemporary America.** (3) A
The United States from 1945 to the present. *General studies:* SB, H.
- 414 The Modern American Economy.** (3) A
Origins of 19th-century slavery and industrialization; 20th-century crisis and regulation: political economy of an advanced capitalist democracy. Prerequisite: ECN 111 or 112 or HIS 103 or 104. *General studies:* SB, H.
- 415 American Diplomatic History.** (3) A
American relations with foreign powers, 1776–1898. Prerequisite: HIS 103 or instructor approval. *General studies:* SB, H.
- 416 American Diplomatic History.** (3) A
American relations with foreign powers from 1898 to the present. Prerequisite: HIS 104 or instructor approval. *General studies:* SB, G, H.
- 417 Constitutional History of the United States.** (3) N
Origin and development of the American constitutional system from Colonial origins through Reconstruction. Prerequisite: HIS 103 or instructor approval. *General studies:* SB, H.
- 418 Constitutional History of the United States.** (3) N
Origin and development of the American constitutional system, from Reconstruction to the present. Prerequisite: HIS 104 or instructor approval. *General studies:* SB, H.
- 419 American Urban History.** (3) A
The history of the city in American life from colonial times to the late 19th century. *General studies:* SB, H.
- 420 American Urban History.** (3) A
The history of the city in American life from the 19th century to the present. *General studies:* SB, H.
- 421 History of American Labor.** (3) A
American workers, from the colonial period to the present, including farmers, slaves, housewives, the skilled and unskilled, unionized and nonunionized. Prerequisite: HIS 103 or 104 or MGT 301. *General studies:* SB, H.
- 422 Rebellious Women.** (3) A
Examination of the roles of rebellious women in history through the study of autobiography, biography, and theory. *General studies:* L2, SB, H, C.
- 423 Recent American Intellectual History.** (3) A
Major movements in 20th century science, religion, and philosophy. *General studies:* SB, H.
- 424 The Hispanic Southwest.** (3) N
Development of the Southwest in the Spanish and Mexican periods to 1848. *General studies:* SB, H.
- 425 The American Southwest.** (3) N
Development of the Southwest from 1848 to the present. *General studies:* L2, SB, H.
- 426 Indian History of the Southwest.** (3) S
Comprehensive review of historical events from prehistoric peoples, the Spanish and Mexican periods, and the American period after 1846 to the present. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, C, H.
- 428 Arizona.** (3) A
Emergence of the state from early times to the present. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, H.
- 430 20th-Century Chicano History.** (3) A
Historical development of the Chicano community in the 20th century. *General studies:* SB, H.

431 The French Revolution and the Napoleonic Era. (3) N

Conditions in France before 1789, the Revolutionary decade from 1789 to 1799, the organization of France under Napoleon, and the impact of changes in France on European society. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, H.

433 Modern France. (3) A

Social, political, economic, and cultural transformations of French society, 1815–present. Impact of industrialization, war and revolution on people's lives. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, G, H.

434 Hitler: Man and Legend. (3) N

A biographical approach to the German Third Reich emphasizing nature of Nazi regime, World War II, and historiography. *General studies:* SB, H.

435 Modern Germany. (3) A

Germany since 1840. *General studies:* SB, G, H.

437 Eastern Europe and the Balkans. (3) A

Peoples and countries of eastern and southeastern Europe in the 19th and 20th centuries from 1800 to 1914, emphasizing the Hapsburg and Ottoman Empires. *General studies:* SB, H.

438 Eastern Europe and the Balkans. (3) A

Peoples and countries of eastern and southeastern Europe in the 19th and 20th centuries, emphasizing the successor states from 1914 to the present. *General studies:* SB, G, H.

441 Imperial Russia. (3) A

Development of Russian political, economic, social, religious, and intellectual institutions and traditions from the end of the 17th century to the collapse of the tsarist autocracy in 1917. *General studies:* SB, H.

442 The Soviet Union. (3) A

An examination of Soviet politics, economic development, and foreign relations from the 1917 Revolution to the present. *General studies:* SB, G, H.

443 Russia and the United States. (3) A

Official and unofficial relations between Russia and the United States, from the late 18th century to the present, emphasizing period following the Bolshevik Revolution. *General studies:* SB, G, H.

445 Tudor England. (3) A

Political, social, economic, and cultural developments in 16th-century England. *General studies:* SB, H.

446 Stuart England. (3) A

Political, social, economic, and cultural developments in 17th-century England. *General studies:* SB, H.

449 Modern Britain. (3) A

Factors contributing to Britain's position as the world's leading power in the 19th century and its decline from that position in the 20th century. *General studies:* SB, G, H.

450 British Constitutional History. (3) A

Historical development of the constitutional system of Great Britain from the Middle Ages to the present, emphasizing the growth of democracy. *General studies:* SB, H.

451 The British Empire. (3) A

British imperialism and colonialism in Africa, the Americas, Asia, and the South Pacific. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, H.

452 Economic History of Europe. (3) N

Impact of industrialism upon the political, social, and cultural life of Europe from the Renaissance to the 19th century. *General studies:* SB, H.

453 Economic History of Europe. (3) N

Impact of industrialism upon the political, social, and cultural life of Europe in the 19th and 20th centuries. *General studies:* SB, G, H.

454 Intellectual History of Modern Europe. (3) A

Major developments in European thought from the scientific revolution: Copernicus through Bentham. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, H.

455 Intellectual History of Modern Europe. (3) A

Major developments in European thought from Karl Marx to the present. Prerequisite: upper-division standing or instructor approval. *General studies:* SB, H.

456 History of Spain. (3) N

Cultural, economic, political, and social development of Spain from earliest days to 1700. *General studies:* SB.

457 History of Spain. (3) N

Cultural, economic, political, and social development of Spain from 1700 to the present. *General studies:* SB.

460 Spanish South America. (3) N

Political, economic, and social development of the Spanish-speaking nations of South America since independence. 19th-century developments. *General studies:* SB, H.

461 Spanish South America. (3) N

Political, economic, and social development of the Spanish-speaking nations of South America. 20th-century developments. *General studies:* SB, H.

463 Intellectual and Cultural History of Latin America. (3) N

Main currents of thought, the outstanding thinkers, and their impact on 19th- and 20th-century Latin America. Cultural and institutional basis of Latin American life. *General studies:* SB, H.

464 The United States and Latin America. (3) N

The Latin American struggle for diplomatic recognition, attempts at political union, participation in international organizations since 1810, and relations between the United States and Latin America. *General studies:* SB, G, H.

466 Mexico. (3) A

Political, economic, social, and cultural developments from earliest times to 1810. *General studies:* SB, H.

467 Mexico. (3) A

Political, economic, social, and cultural developments from 1810 to the present. *General studies:* SB, H.

468 Brazil. (3) N

Discovery, conquest, and settlement by the Portuguese; achievement of independence; rise and fall of the empire; problems and growth of the republic to the present. *General studies:* SB, H.

469 Chinese Thought and Way. (3) N

China's classics in translation studied both for their intrinsic ideas and for the origins of Chinese thought. *General studies:* SB, H.

470 Chinese Thought and Way. (3) N

Evolution of Confucian Tao (Way), its synthesis of Taoism and Buddhism, and 20th-century reactions to that Tao. *General studies:* SB, G, H.

471 The United States and Japan. (3) A

Cultural, political, and economic relations in the 19th and 20th centuries. Emphasis on post World War II period. *General studies:* SB, G, H.

472 The United States and China. (3) N

Emphasis on viewing from both sides the roller coaster ride of cultural, political, and economic relations in the 20th century. *General studies:* SB, G, H.

473 China. (3) A

Political, economic, social, and cultural history of the Chinese people from early times to the late 17th century. *General studies:* SB, H.

474 China. (3) A

Political, economic, social, and cultural history of the Chinese people from mid-17th century to the present. *General studies:* SB, G, H.

475 The American Experience in Vietnam, 1945–1975. (3) N

Intersection of American and Asian histories in Vietnam, viewed from as many sides as possible. *General studies:* SB, G, H.

477 Japan. (3) A

Political, economic, social, and cultural history of the Japanese people from early times to the 19th century. *General studies:* SB, H.

478 Japan. (3) A

Political, economic, social, and cultural history of the Japanese people from 19th century to the present. *General studies:* SB, G, H.

479 The Chinese Communist Movement. (3) N

Analysis of the communist movement in 20th century China, with emphasis on its historical setting. *General studies:* SB, G, H.

481 The People's Republic of China. (3) N

Analysis of major political, social, economic, and intellectual trends in China since the founding of the People's Republic in 1949. *General studies:* SB, G, H.

485 Historic Preservation. (3) N

Comparative approach to preservation of historic resources in Europe and the United States; analysis of regulatory framework and case studies.

495 Methods of Teaching History. (3) S

Methods in instruction, organization, and presentation of the subject matter of history and closely allied fields.

498 History Pro-Seminar. (3) F, S

Required course for majors on topic selected by instructor; introduction to historical research and writing; writing intensive course related to the development of research skills and writing tools used by historians. *General studies:* L2.

502 Public History Methodology. (3) F

Introduction to historical research methodologies, techniques, and strategies used by public historians. Readings, short papers, and guest speakers. Required for students in the public history concentration.

503 Public History Research. (3) S

Individual and group research projects utilizing the approaches and techniques of the public historian. Required for public history business emphasis.

512 Historians of Early Europe. (3) N

A study of the history of European historical writing from the Greeks to the 18th century.

513 Historians of Modern Europe. (3) N

A study of 19th- and 20th-century European historical writing.

514 Historians of the United States. (3) N

A study of the history of American historical writing from the early colonial days to the 20th century.

515 Studies in Historiography. (3) F, S

Methods and theories of writers of history. May be repeated for credit.

525 Historical Resource Management. (3) F

Identification, documentation, and interpretation of historic period buildings, sites, and districts. Emphasis on interdisciplinary efforts among historians, architects, and anthropologists.

526 Historians and Preservation. (3) S

Preparation of historians for public and private historic preservation programs. Prerequisite: HIS 525 or instructor approval.

527 Historical Administration. (3) F

Preparation of historians in administration of archives, historical sites, historical museums, historical societies, and historical offices in government agencies.

530 American Business History. (3) F

Origins, evolution, and present form of various major U.S. industries. Required for public history business option.

532 Community History. (3) N

Techniques and methods of community history emphasizing local resources. Required for community history option. Seminar.

551 Comparative Histories of War and Revolution. (3) A

A comparative field course of the themes of war and revolution.

552 Comparative History of Family and Community. (3) N

A comparative course with a focus on family, including minority and ethnic groups, in society.

553 Comparative History of State and Institutions. (3) N

A comparative course that explores the changing nature of central institutions and government.

554 Comparative Historical Population Studies: Ethnicity, Economy, and Migration. (3) N

A comparative course that explores the impact of social, cultural, or economic changes in the population.

555 Comparative Historical Topics. (3) N

This course analyzes a variety of specific social, political, cultural, and intellectual topics.

591 Seminar. (3) N

Topics may be selected from the following areas:

- (a) U.S. History
- (b) European History
- (c) English History
- (d) Latin American History
- (e) East Asian History
- (f) British History

May be repeated for credit.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

SCHOLARLY PUBLISHING**PUB 501 Introduction to Scholarly Publishing.** (3) F

An introduction to the purpose, organization, and operation of scholarly publishing, including its history, societal role, and current issues. Lecture, discussion. Prerequisite: graduate standing.

502 Scholarly Editing. (3) F

Publishing procedures, proofreading, and manuscript editing of scholarly books, textbooks and scholarly journals. Lecture, discussion. Prerequisite: admission to scholarly publishing certificate program. Pre- or corequisite: PUB 501.

503 Advanced Scholarly Editing. (3) S

Advanced manuscript editing, acquisitions, developmental editing, and indexing of scholarly books, textbooks, and scholarly journals. Lecture, discussion. Prerequisites: PUB 501, 502.

510 Research in Scholarly Publishing. (3) S

Individual or group research projects on issues in scholarly publishing, including legal, economic, design, technological, and related topics. Directed research, discussion. Prerequisites: PUB 501; admission to scholarly publishing certificate program.

584 Scholarly Publishing Internship. (1–6) A

Structured, supervised, practical experience with a scholarly publisher or other appropriate publishing enterprise. Internship. Prerequisites: PUB 501; 9 hours in scholarly publishing core; instructor approval.

598 Special Topics in Scholarly Publishing. (1) S

One-week short courses covering special topics in scholarly publishing, to be taught by visiting publishing professionals. Lecture, discussion. Prerequisites: PUB 501; admission to scholarly publishing certificate program.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Interdisciplinary Humanities Program

Charles J. Dellheim

Director

602/965–6747

HUMANITIES—B.A.

The major in Humanities is interdisciplinary and may be intercollegiate; it consists of 45 hours. It is recommended that students take 12 hours of supporting courses that may be credited toward general studies requirements where appropriate. In consultation with an advisor, the student takes 29 hours of interdisciplinary humanities courses, including:

1. a core of 14 hours: HUM 200, 301, 302, 498;

2. 16 hours of courses selected to develop an interdisciplinary cultural or area concentration (examples: medieval or Renaissance studies); and
3. 15 hours from those courses required for one of the humanities disciplinary majors.

The humanities are those learned bodies of knowledge that are used to express ideas, to understand the meaning of words, and to explore the values and beliefs that underlie our culture and the cultures of others. As defined by congress, the humanities include history, literature, linguistics, philosophy, jurisprudence, ethics, comparative religion, archaeology, the history and criticism of the arts and those aspects of the social sciences that employ a philosophical or historical rather than quantitative approach to knowledge.

See this catalog for course descriptions for architecture, art, anthropology (cultural), dance, English, foreign languages, history, music, philosophy, religious studies, and theatre. Twelve additional hours of supporting courses in consultation with the advisor are recommended especially to broaden the student's historical and aesthetic understanding. The courses are to be selected from the following disciplines: architecture, art history, dance, English, foreign languages, history, music, philosophy, religious studies, theatre, and other approved disciplines.

GRADUATE PROGRAM

The program also offers the Master of Arts degree in Humanities through the Graduate Committee on Humanities. Consult the *Graduate Catalog* for requirements.

HUMANITIES**HUM 110 Contemporary Issues in Humanities.** (3) F, S

Responses of literature, art history, history, philosophy, religion, and other disciplines to common problems affecting modern American life. *General studies: HU, H.*

200 Encountering the Humanities. (3) S

Introduction to the languages, methods, and objectives of the study of the interdisciplinary humanities. Intersections of ideas, values, and cultural institutions. Lecture, studio, workshop. Prerequisite: Humanities major. *General studies: HU.*

294 Special Topics in the Humanities. (3) A
(a) Introduction to Southeast Asia.

An interdisciplinary introduction to the cultures, religions, political systems, geography, and history of Southeast Asia.

301 Humanities in the Western World. (4) F
Interrelation of arts and ideas in Western Civilization, Hellenic through medieval. 3 hours lecture, 1 discussion meeting per week. *General studies: L1, HU, H.*

302 Humanities in the Western World. (4) S
Interrelation of arts and ideas in Western Civilization, Renaissance to the present. 3 hours lecture, 1 discussion meeting per week. *General studies: L1, HU, H.*

413 Comedy: Meaning and Form. (3) S
Nature and characteristics of comedy in the literary, fine, and performing arts. Prerequisites: HUM 301 and 302 or equivalents. *General studies: HU.*

414 Tragedy: Meaning and Form. (3) A
Nature and characteristics of literary and artistic expressions called tragic. Prerequisites: HUM 301 and 302 or equivalents. *General studies: HU.*

494 Special Topics in the Humanities. (3) N
Open to all students. Topics include:

- (a) Western Historical or Contemporary Cultures
- (b) Non-Western Cultures
- (c) Cultures of Ethnic Minorities
- (d) American Fine Arts
- (e) Comparative Fine and Performing Arts

498 Pro-Seminar in the Humanities. (3) A
Methodologies and comparative theories for the study of relationships between various aspects of culture, the history of ideas, and the arts. For students with a major in humanities with upper-division standing. May be repeated for a total of 6 semester hours, when topics vary.

511 Structures of Knowledge. (3) F
Theories and examples of structures of knowledge, including such topics as metaphor, semiotics, and knowledge of the "other."

512 Writing Cultures. (3) S
Theories and methods of representing Western and non-Western cultures in literature, history, ethnography, and pictorial media.

513 Interpretation of Cultures. (3) A
Methodologies and comparative theories for the study of relationships between various aspects of culture, the history of ideas, and the arts. May be repeated for a total of 6 semester hours, when topics vary.

549 Contemporary Critical Theory. (3) F
An advanced survey of major schools of 20th-century literary and critical theory. Lecture, discussion. Cross-listed as ENG 502.

591 Seminar. (3) A

Topics include

- (a) Comedy: Meaning and Form
- (b) Tragedy: Meaning and Form
- (c) Theory and Culture

598 Special Topics in the Humanities. (3) N
Open to all students. Topics include

- (a) Western Historical or Contemporary Cultures
- (b) Non-Western Cultures
- (c) Cultures of Ethnic Minorities
- (d) American Fine Arts
- (e) Comparative Fine and Performing Arts

Omnibus Courses: See page 44 for omnibus courses that may be offered.