DEDMAN COLLEGE

GENERAL INFORMATION

Dedman College is the heart of SMU. It is home to the humanities, social and behavioral sciences, mathematics, and natural sciences — disciplines central to the traditions of higher education.

In 1915 when SMU opened the doors of Dallas Hall to welcome the first class of students, those students matriculated into the College of Arts and Sciences, the academic unit that would eventually become Dedman College. In 1963, with the formulation of the Master Plan, the College became the School of Humanities and Sciences in recognition of its role in the specialized education of students in the liberal arts. From 1963 until 1980, the basic liberal arts education for all SMU students was provided by University College, an independent, non-degree granting academic unit.

The School of Humanities and Sciences was merged in 1980 with University College to create a new entity central to the enterprise of undergraduate education. It would not only provide the basic foundations in liberal arts education to all SMU students through the General Education Curriculum but also serve as a center for the integration of specialized education in the humanities, social sciences, and natural sciences. As an indication of its centrality to the educational process, the name was changed from school to college, emphasizing that it is a community of students and teachers, whose life together, no matter how diversified and specialized, is unified by the implicit and explicit values derived from a liberal arts education. In 1981, the newly formed college was endowed by Robert H. and Nancy Dedman and became Dedman College.

In addition to being the oldest academic unit at SMU, Dedman College is also the largest. In 1992, it enrolled more than 1,400 undergraduate majors and nearly 340 graduate students. More than 250 full-time faculty are based in the College. Undergraduate students in Dedman College may major in any one of 52 programs, and choose from 50 minor programs. The College offers 22 graduate programs leading to a Master's degree and 11 programs leading to a Doctor of Philosophy degree. Its 15 academic departments include: Anthropology, Biological Sciences, Chemistry, Economics, English, Foreign Languages and Literatures, Geological Sciences, History, Mathematical Sciences, Philosophy, Physics, Political Science, Psychol-

Minors available include:

African-American Studies
Anthropology
Archaeological
Biomedical
Cultural
Environmental Earth Sciences
Ethics
Ethics
Medieval Studies
Mexican-American Studies
Mexican-American Studies
Modern European Studies
Natural Sciences
Natural Sciences

Climese Natural Sciences
Asian Studies French Philosophy
Biological Sciences German Physics
Chemistry German Area Studies Political Science

Classical Studies Italian American Politics, Law, Economics Italian Area Studies and Administration

Econometrics Japanese Comparative and International

 International Economics
 Japanese Area Studies
 Politics

 Labor Economics
 Russian
 Political Thought

Managerial Economics Russian Area Studies Psychology Monetary Economics Spanish Religious Studies Public Economics Geology Sociology Economics of Industrial Southwest Studies History Statistical Science Organization International Studies English Latin-American Studies Women's Studies

Specific degree requirements and additional information for any of these programs can be found in the departmental sections of this catalog.

logical reasoning, and written and oral expression. Students should keep in mind that the spoken and written word are the principal tools of the legal profession. Students who intend to study law must develop an excellent knowledge and grasp of the English language as well as a clear and concise style of expression.

Furthermore, a sound liberal arts education is generally best for most pre-law students. Courses in political science, history, economics, statistics, and anthropology help a student understand the structure of society and the problems of social ordering with which the law is concerned.

The study of philosophy, literature, fine arts, foreign languages, and other cultures imparts familiarity with traditions of universal thought and trends that have influenced or tend to influence legal developments nationally and internationally. The examination of human behavior in sociology and psychology will aid the prospective law student in understanding the types and effects of human behavior with which law is involved.

The systematic ordering of abstractions and ideas acquired by studying logic and the sciences contributes much to a pre-law student's capacity to analyze, understand, and rationally organize his or her thoughts. And, in some fields of law practice, it is useful for a student to have a fundamental knowledge of technology, engineering, computers, and accounting.

Law School Admission Test. Candidates for admission to an American Bar Association-approved school of law must take the Law School Admission Test administered by the Law School Admission Service of Newtown, Pennsylvania. Candidates are urged to take the test on the June, October, or December testing dates preceding the fall term in which they seek admission to law school.

For additional pre-law information, undergraduate students may consult the prelaw adviser in the Dedman College Advising Center.

CREDIT REQUIREMENTS. Except in very rare circumstances, all approved law schools require that an applicant for admission have been granted a bachelor's degree from an accredited college or university.

Admission to the SMU School of Law. Admission to the SMU School of Law is by selection based upon the academic record of the applicant, the applicant's Law School Admission Test score, and other available data. Further information can be obtained by writing the Admissions Officer, SMU School of Law, PO Box 750110, Dallas TX 75275-0110. World Wide Web: www.law.smu.edu/admissions

PRE-MEDICAL/DENTAL

Medical and dental schools seek students who have demonstrated strength in their major — any major of the student's choosing — and in the sciences. There is no preferred major. Honors work is appropriate.

Students planning to pursue the study of medicine or dentistry are assigned to one of the pre-medical advisers in the Advising Center during their first year at SMU. Thereafter, they work with an adviser in their major and the Health Professions Advisory Committee.

Credit Requirements. Most medical and dental schools require the following coursework for entry:

English, six hours; Mathematics (including calculus), six hours; Biology, 8-14 hours — 14 for Texas Medical Schools; Chemistry, 16-21 hours; and Physics, eight hours. This coursework may be done as part of a major or minor in the sciences or as electives in a non-science major or minor. These courses should be completed by the end of the junior year.

students should confer with advisers in both schools at an early date in order to prepare a proposed plan of study. Students are individually responsible for knowing and complying with all regulations and requirements that may apply to their respective programs.

TRANSFER COURSES FROM OTHER INSTITUTIONS

Once matriculated at SMU, students wishing to enroll for and transfer in courses offered at other institutions in subject areas within the Dedman College curriculum must receive prior approval from their adviser, the chair of the SMU department that normally would offer the course, and the dean of Dedman College. Approval may be denied for educational reasons. Post-matriculation transfer work from two-year institutions will not be approved.

ADMISSION

All incoming first-year students to the University are admitted to Dedman College. Please see the Admission to the University section of this catalog for requirements. Students wishing to pursue majors in the humanities or in the social or natural sciences or in various multidisciplinary programs remain in Dedman College for their undergraduate education. Specific degree requirements and additional information for any of these programs can be found in the departmental sections of this catalog. Admission is open to qualified undergraduate and graduate applicants without regard to race, color, ethnic or national origin, creed, gender, or physical disability.

Admission from Other Schools Within Southern Methodist University

An individual enrolled in another school of the University may apply to the dean of the school in which the student is currently enrolled for permission to transfer into a degree-granting program in Dedman College. A student who has achieved a cumulative G.P.A. of 2.00 on all SMU work attempted will normally be admitted to candidacy for a degree in Dedman College.

READMISSION OF FORMER STUDENTS

If three or more years have elapsed since the last enrollment at SMU, the student must meet any new requirements and is subject to any new regulations that have been instituted in the interval.

MEDICAL COLLEGE ADMISSION TEST. Candidates for admission to medical school must take the Medical College Admission Test (MCAT). The MCAT should be taken in the spring of the junior year. Candidates for dental school should take the Dental Admission Test (DAT), also in the spring of the junior year.

Further information concerning the program can be obtained from the Chair of the Health Professions Recommendation Committee.

UNDERGRADUATE INTERNSHIP PROGRAM

The Dedman College Undergraduate Internship Program helps students begin to prepare for employment. Internships are designed to demonstrate and reinforce the valuable and highly marketable skills that our students acquire.

The following guidelines apply:

- Credit-bearing internships are unpaid and supervised by faculty, department or program.*
- Dedman Internship Program Orientation and Standardized University Release of Liability for Education Internship are required.
- Internships are based on a written learning contract signed by the student and faculty supervisor and approved by the department chair or director of undergraduate studies. (Students and site supervisors will complete evaluations of the experience. These evaluations would not be considered in determination of the grade.)
- Internships require a written component based on and reflective of the experiential dimension.
 - Internships are available only through approved internship courses.
 - Internship credit may range from one to three hours.
- The maximum total internship credit that may be applied toward a degree is three hours.
 - Internships must be based on unpaid experiences.

TEACHER CERTIFICATION PROGRAMS

SMU has offered a teacher preparation program since opening in 1915. Accredited by the Texas Education Agency (TEA), SMU offers certification in elementary, secondary, and all level music education. The program enables students to be certified to teach in Texas as well as in other states.

For additional information concerning certification requirements, students should consult the section on teacher preparation in this catalog or contact the teacher preparation office.

MULTIPLE MAJORS AND MINORS

Students are encouraged to broaden their education by taking full advantage of the University's diverse undergraduate programs. Although only one major is required for graduation, with careful planning students may complete two or more majors and/or multiple minors within the prescribed total hours.

Students may also qualify for baccalaureate degrees from two schools in the

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^{*}Non-credit bearing internships may either be paid or unpaid and are without faculty, department or program supervision. Internship orientation is strongly suggested. A University Release of Liability is required.

DEGREE REQUIREMENTS

Dedman College offers two undergraduate degrees: the Bachelor of Arts and the Bachelor of Science. For the degree available in a specific area of study, consult the individual programs of study described elsewhere in this catalog.

- 4. A minimum cumulative G.P.A. of 2.00 for all work attempted for completion of major or minor requirements.
 - 5. No more than 30 hours with a grade of D(D-, D, D+).
 - 6. No more than 12 hours with a grade of P.

RESIDENCY. As minimum requirements, a candidate for a degree in Dedman College must take the following hours in residence at SMU:

- 1. A total of 60 hours.
- 2. A total of 18 hours of advanced work in the major.
- 3. A total that is equivalent to at least 50 percent of the advanced work required in any minor program selected. Departmental requirements may exceed this minimum.
 - 4. A total of 45 of the last 60 hours earned toward the degree.

REQUIREMENTS FOR OBTAINING TWO DEGREES SIMULTANEOUSLY. A student who selects two majors in Dedman College that lead to different degrees (B.A. and B.S.) may receive both degrees simultaneously by completing all requirements in each major, along with general requirements for a degree in Dedman College. However, a student may not be awarded more than one baccalaureate degree from the same department.

A student may pursue a program of study leading to a degree from Dedman College along with a degree from Cox School of Business, Meadows School of the Arts, or the School of Engineering and Applied Science. The student must obtain approval for the proposed program of study from the Deans of the schools involved.

Graduation Honors. There are three classes of graduation honors: *summa cum laude*, requiring a minimum G.P.A. of 3.90; *magna cum laude*, requiring a G.P.A. of 3.70; and *cum laude*, requiring a G.P.A. of 3.50. Eligibility for graduation honors will be based upon a student's total academic program. All academic work attempted at other colleges or universities that is equivalent to SMU work will be included in the calculation of the G.P.A. For students who have transferred to SMU, two grade-point averages will be calculated, that for all work attempted, and that for work completed at SMU. Honors will be based on the lower of the two averages.

DEPARTMENTAL DISTINCTION. By successfully completing a special program of study in the major department, a student may be awarded departmental distinction regardless of eligibility for graduation honors. The program of study normally will be undertaken in both the junior and senior years. This award is conferred by the major department on the basis of certain criteria prescribed by the department, but all programs include the minimum requirements of independent reading and research beyond the regular departmental requirements for a degree and the completion of a senior paper or research report. Further information may be obtained from the individual departments.

For more information about Dedman College programs and faculty, please consult the College's World Wide Web site at www.smu.edu/~dedman/.

In addition to providing the basis for careers in the subdisciplines, anthropology provides a background for professional careers in teaching, research, international affairs, medicine, or law. A grade of C- or better must be earned in all courses taken in fulfillment of the requirements for the Anthropology major. Students majoring in

- 2302. Prehistoric Cultures. Origins of human culture, arts of Stone Age hunting societies, earliest village farmers, and origins of urban art and architecture. Fulfills co-curricular requirement for Diversity.
- 2315. Human Evolution. Introduction to physical anthropology and human evolution: biological bases of man's social nature and organic evolution. Fossil record and genetics. Fulfills General Education Distribution requirements for Science/Technology.
- 2331 (CF 2331). THE FORMATION OF INSTITUTIONS: ROOTS OF SOCIETY. The nature of social institutions and how they change and become more complex. A case-study approach that examines selected non-Western societies at different levels of complexity. Fulfills co-curricular requirement for Diversity.
- 2345. Leadership and Race Relations

- environments, subsistence, and related levels of sociopolitical integration from Tierra del Fuego to the Amazon basin and the Andes. Fulfills co-curricular requirement for Diversity.
- 3314. Peoples of Africa. A contemporary study of cultures and social structures of Sub-Saharan African peoples and an examination of the dynamics of contemporary African societies. Fulfills co-curricular requirement for Diversity.
- 3315. Origins of Civilization. Considers those cultural and historic factors that led from the development of agriculture to the first urban states in Egypt and Mesopotamia. Fulfills co-curricular requirement for Diversity.
- 3316. Peoples of the Pacific. A survey of Pacific Island social systems focusing on Melanesian, Micronesian, and Polynesian culture areas. Explores the nature of precontact societies, colonial and missionary influences, and the status of contemporary populations. Fulfills cocurricular requirement for Diversity.
- 3317. Peoples of Southeast Asia. A comparative study of insular and mainland cultures of Southeast Asia, their history and development, and their social and economic structures. Fulfills co-curricular requirement for Diversity.
- 3318. Prehistory of the American Southwest. Origins and development of native Indian cultures in the American Southwest and adjacent northwestern Mexico. Ranges in time from the first appearance of humans to the time of pueblo civilization. Fulfills co-curricular requirement for Diversity.
- 3319. Human Ecology. Interactions between human populations and their environments. Relationships between population size, technology, climate, and behavior in various living societies. Fulfills co-curricular requirement for Diversity.
- 3322. STATISTICAL REASONING IN ANTHROPOLOGY. Particular aspects of statistical data processing and reasoning, including the construction of measurement scales, tabular and graphical descriptions, cross classifications, percentages and probabilities, sampling, and the expression of relationships through the use of models. Lab sessions will investigate anthropological data sets through the use of the student version of SPSS for Windows.
- 3327 (CF 3319). ECONOMIC AND POLITICAL CHANGE IN THE WORLD SYSTEM. Introduction to anthropological perspectives on global transformations: world economic integration; Third World development and sociocultural change; ethnic resurgence and nationalism; population migration; and changes in women's roles and statuses. Fulfills co-curricular requirement for Diversity.
- 3334 (CF 3334). FANTASTIC ARCHAEOLOGY AND PSEUDOSCIENCE: LOST TRIBES, SUNKEN CONTINENTS, ANCIENT ASTRONAUTS, AND OTHER STRANGE IDEAS ABOUT THE PAST. Did ancient astronauts visit the Earth? Are there secrets of the Maya calendar that archaeologists aren't revealing? Is Creation a scientific alternative to evolution of humanity? This course investigates these and other claims about our past, and how archaeologists respond to them.
- 3335 (ENGL 2321). THE DAWN OF WISDOM: ANCIENT CREATION

- 3355. Peoples of Europe. Anthropological survey of social and cultural dimensions of Europe. Explores unity and diversity within the region, the role of gender, religion, class, and ethnicity in structuring the lives of contemporary Europeans.
- 3356. Before Civilization. A survey of the paleolithic archaeology of the first three million years of human history in the Old World. Emphasis is upon adaptation and cultural change.
- 3358. Indians of the Southwest from the 16th Century to the Present. An introduction to the non-Pueblo and Pueblo peoples of the Greater Southwest, with a focus on Indian-Indian and Indian-Euroamerican relations and the resultant transformations. Fulfills co-curricular requirement for Diversity.
- 3361. Language in Culture and Society. An investigation of social and cultural factors affecting the use of language. Topics include linguistic variation, Black English, women's language, and body language. Fulfills co-curricular requirement for Diversity.
- 3366 (RELI 3366). Magic, Myth, and Religion Across Cultures. A cross-cultural and comparative exploration of religion, ritual, magic, and supernatural belief systems. Examines how religion permeates other aspects of society and culture. Fulfills co-curricular requirement for Diversity.
- 3368 (SOCI 3368). Urban Problems: A Cross-Cultural Perspective. Evolution, develop-

4350, 4351, 4352. Special Topics

ANTHROPOLOGY COURSES BY SUBFIELD

Courses listed under 4350/51/52 or 4390/09 may count for any of the subfields, depending on the topic.

Subfield: General

2321 THE DAWN OF WISDOM: ANCIENT CREATION STORIES FROM FOUR CIVILIZATIONS

2331 The Formation of Institutions: Roots of Society

3319 Human Ecology

3322 STATISTICAL REASONING IN ANTHROPOLOGY

4191, 4291, 4391, 4392, 4292 INDEPENDENT STUDY AND RESEARCH

4366 Theoretical Perspectives in Anthropology

4399 SENIOR SEMINAR IN 39 448.44 Tm 0.005 Tc 0.8 S 0 Tw (HEORE2 Tc (NTHROPOLOGY)Tj 8 EoOw (HE

- 4307 Seminar in International Health
- 4308 CHILDHOOD IN CROSS-CULTURAL PERSPECTIVE
- 4347 SEMINAR IN MESO-AMERICAN ETHNOLOGY
- 4367 COMPARATIVE PEASANT SOCIETY
- 4384 CULTURE CHANGE AND INTERNATIONAL DEVELOPMENT
- 5336 Anthropology and Medicine
- 5344 RESEARCH METHODS IN ETHNOLOGY

Subfield III: Anthropological Linguistics

- 3361 LANGUAGE IN CULTURE AND SOCIETY
- 5311 APPLIED LINGUISTICS
- 5359 LINGUISTICS (GENERAL)

Subfield IV: Physical Anthropology

- 2315 Human Evolution
- 3302 Monkeys and Apes: The Nonhuman Primates
- 3371 NUTRITIONAL PROBLEMS OF MODERN POPULATIONS
- 4371 THE NATURE OF THE AGING PROCESS
- 4377 THE HUMAN FOSSIL RECORD

ART HISTORY

Degree programs in art history are offered through the Meadows School of the Arts. Degrees offered in art history include the Bachelor of Arts (B.A.), Bachelor of Fine Arts (B.F.A.), and the Master of Arts (M.A.). The Bachelor of Arts degree in art history places the history of art within the wider context of such humanistic disciplines as history, religion, aesthetics, politics, language, and civilization generally. The Bachelor of Fine Arts provides a course of study that incorporates both art history and studio art. The Master of Arts degree in art history is designed to provide a broad but rigorous background in the history of art. A minor in art history enables all students to extend their study into the realm of the visual arts and architecture and so to broaden their appreciation of the cultural content of artistic form.

For further details concerning admission and program requirements, consult the R

BIOLOGICAL SCIENCES

Professor Ubelaker, Department Chair

Professors: Buchanan, Orr, Ruben, Sohal, Vik; Associate Professors: Allison, Jones; Assistant Professors: Gambill, Kennell; Adjunct Professors: B. Jacobs, Strecker; Professor Emeritus: McCarthy.

- 3350. Cell Biology. The structure and function of cells. Three lecture hours each week. *Prerequisites:* Junior standing, BIOL 3304, CHEM 3372.
- 3354. Parasitology. Comparative study of parasitic organisms and their role in diseases. Two lecture hours and one three-hour laboratory each week.
- 3357. BIOLOGY OF INVERTEBRATES. A general survey of the invertebrates with emphasis on identification of local species, morphological adaptations, systematics, and ecology. Twoad.

3399. Undergraduate Research II. This course is offered on a pass/fail basis only, and cannot be applied toward the requirements for the major in Biological Sciences. *Prerequisite:* BIOL 3398, and approval by the faculty sponsor and the Undergraduate Studies Committee of the Department. 4132. Senior Seminar. Discussion of current problems of biological interest. One hour each week. *Prerequisite:*

2321 (Southwestern Environments), or ENV 2304 (Introduction to Environmental Engineering). Also, at least one intermediate environmental science elective, chosen from BIOL 3307 (Ecology), BIOL 3343 (Field Botany), GEOL 3353 (Modern and Ancient Climates), GEOL 3366 (Environmental Geology), or ENV 2421 (Aquatic Chemistry); and at least two advanced environmental science electives, chosen from CHEM 5390 (Environmental Chemistry), GEOL 5384 (Hydrogeology), ENV 5313 (Environmental Chemistry), or ENV 5333 (Laboratory Methods in Environmental Engineering). One of the advanced electives must be CHEM 5390 or ENV 5313. Note that GEOL 2320, 2321, and BIOL 3343 are offered through the SMU-in-Taos summer program at Fort Burgwin, New Mexico. BIOL 1402 is prerequisite for BIOL 3307 and 3343.

Students planning to attend graduate school are advised to complete at least two term hours of Undergraduate Research (CHEM 4177/4297 or GEOL 4296), and MATH 2343 (Differential Equations) or a statistical science course at the 4000 or 5000 level. This degree program meets the guidelines of the American Chemical Society for professional training in environmental chemistry.

REQUIREMENTS FOR THE B.A. DEGREE. The completion of a minimum of 25 term hours in the department, including CHEM 1113, 1114, 1303, 1304 (or 1307, 1308), 3371, 3372 (or 3373 or 3374), 3117, 3118, 5381 (or 5383), plus at least seven additional hours at the advanced level, to be chosen in consultation with a departmental adviser. In addition, PHYS 1105, 1303, 1106, 1304 (or PHYS 1407, 1408), and MATH 1337 are required.

THE HONORS PROGRAM

- 1305, 1306. General Chemistry for Engineering Majors. This course is designed primarily for students majoring in engineering. It offers an introduction to the fundamental principles and theories of chemistry with coverage of some topics relating to the chemistry of materials.
- 1307, 1308. General Chemistry (Honors). An honors option to CHEM 1303, 1304 for well-prepared students with a strong interest in chemistry. *Prerequisite:* One year of high school chemistry and permission of instructor.
- 1113. General Chemistry Laboratory. One three-hour laboratory period each week. *Prerequisite* or *corequisite*: CHEM 1303.
- 1114. General Chemistry Laboratory. One three-hour laboratory period each week. *Prerequisite:* Chemistry 1113; *Prerequisite* or *corequisite:* CHEM 1304.
- 3117. Organic Chemistry Laboratory. One three-hour laboratory period each week. *Corequisite:* CHEM 3371.
- 3118. Organic Chemistry Laboratory. One three-hour laboratory period each week. *Corequisite:* CHEM 3372.
- 3117H, 3118H. Organic Chemistry Laboratory (Honors). An honors option to CHEM 3117, 3118. One three-hour laboratory period each week. *Prerequisite:* Permission of instructor.
- 3351. QUANTITATIVE ANALYSIS. A course involving the theory and practice of quantitative analytical

5396. ADVANCED PHYSICAL CHEMISTRY. Three hours of lecture each week. *Prerequisite:* Permission of instructor.

5486. Instrumental Analysis. A course involving the theory, operation, and application of instrumentation used in the modern chemical laboratory. Two hours of lecture and two three-hour laboratory periods each week.

CLASSICAL STUDIES

Assistant Professor Dowling, Director

ECONOMICS

Professor To be determined, Department Chair

Professors: Batra, Deb, Fomby, Hayes, Huffman, Maasoumi, Slottje, Weber; Associate Professors: Balke, Seo; Assistant Professors: Bogomolnaia, Dolmas, Fredriksson, Millimet, Osang, Saggi, Sandfort: Lecturer: Dadres.

THE

B.A. Degree. The Bachelor of Arts degree in economics is designed primarily for students who want a liberal arts education with an emphasis on economics but with great breadth. This degree shall consist of at least 30 hours in economics, of which no more than six hours may be in courses below the 3000 level. MATH 1309 or 1337 is recommended but not required.

REQUIREMENTS FOR THE B.S. DEGREE. The Bachelor of Science degree in Economics offers more specialized training in economics and provides a firm basis for graduate study in business, economics, or law by requiring six hours of calculus (MATH 1309, 1310, 1337, or 1338); STAT 2301 or 4340 or ISOM 2305; 36 hours in economics; and a higher proportion of advanced economics courses than is required for the B.A. degree.

REQUIREMENTS FOR THE B.S. DEGREE WITH FINANCE APPLICATIONS. The degree combines specialized training in economics with a concentration in areas significant to financial markets, plus three hours each in needed tools of accounting, calculus, statistics, and computer courses. This degree is particularly suited to those seeking careers in the financial sector and requires 27 hours in advanced economics and finance courses.

REQUIREMENTS FOR THE B.S. DEGREE WITH SYSTEMS ANALYSIS. The B.S. degree in economics with systems analysis offers integrated studies in economics, operations research, and computer science. It provides excellent preparation for graduate education in economics, business, or public administration, and for service in both the public and private sectors where quantitative economists provide assistance in policy formulation. Students are required to take MATH 1337, 1338, and 2339; STAT 2301

- 4371. THEORY OF INDUSTRIAL STRUCTURE. (Formerly Structure of American Industry.) Development of American industry and antitrust policies. *Prerequisite*: ECO 3301.
- 4376. SPECIAL TOPICS IN ECONOMIC HISTORY AND DEVELOPMENT. Economic principles are used to explore important and controversial questions. *Prerequisite*: ECO 3301.
- 4378. FINANCIAL ECONOMICS AND INVESTMENT BEHAVIOR. An overview of investment concepts and an exposure to a range of investment alternatives that form an integral part of financial economics. (Cannot be taken if student has taken FINA 4320 or 4326.) *Prerequisite:* ECO 3368 or FINA 3320 or permission of instructor.
- 4382. Economics of Regulated Industries. Study of public utility, transportation, and other regulated industries. *Prerequisite:* ECO 3301.
- 4385. MACROECONOMICS: THEORY AND POLICY. Goes beyond "IS-LM" curves to most recent models using disequilibrium analysis, government budget constraint, rational expectations, and other approaches. *Prerequisites:* ECO 3301 and 3302.
- 4386. TOPICS IN MONETARY ECONOMICS. An in-depth look at current topics in monetary theory and policy. *Prerequisites*: ECO 3301 and 3302.
- 4388. Case Studies in Financial Economics. Gives the student experience in using economic analysis to solve financial problems and to provide a framework for financial decision-making in practice. (Cannot be taken if student has taken FINA 4325.) *Prerequisite:* ECO 3368 or FINA 3320 or permission of instructor.
- 4390. Workshop in Current Economics Issues. By arrangement with instructor and departmental director of undergraduate studies.
- 4391. Development of Economic Doctrine. Analyzes the development of modern economics. *Prerequisites:* ECO 3301 and 3302.
- 4395. Economics

- 5353. Law and Economics. This course provides a framework for and undertakes the analysis of the economic impact of the law. *Prerequisite*: ECO 3301 or equivalent.
- 5357. ECONOMICS OF HUMAN RESOURCES. The economics of investment in human resources such as education and health. *Prerequisite:* ECO 3301. *Recommended:* ECO 4351.
- 5360. ECONOMIC DEVELOPMENT IN THE THIRD WORLD. Theories of growth and planning and the

- 5370. THE AMERICAN SCHOOL. Philosophical and historical foundations of the American school. Current issues including school governance and funding, the role of teachers, administrators, parents and the state in the development and running of our schools also the effects of current social conditions on schooling.
- 5332. Physical Geography. Deals with topics such as earth-sun relations, maps, time zones, seasons, the atmosphere, weather and climate, ecosystems, soils, landforms, and oceans. This course is excellent preparation for elementary teachers and required for those preparing for the Composite Social Studies endorsement.
- 5333. WORLD GEOGRAPHY. A survey of the Earth's geographic and cultural regions including the interrelationships between the natural environment and human societies. This course is excellent preparation for elementary teachers and required for teachers preparing for the Composite Social Studies endorsement.
- 5382. Technology for Educational Improvement. This course examines the uses of educational technology and their applications in K-12 classrooms.

ELEMENTARY EDUCATION

- 5355. MATHEMATICS IN THE ELEMENTARY SCHOOL. The use of an active learning approach in the development of understanding related to quantity, space relationships, and other mathematical and scientific concepts in demonstrated, and appropriate concepts and classroom methods are considered.
- 5363, 5364. INTERNSHIP IN THE ELEMENTARY SCHOOL. One full semester of student teaching in an accredited public or private school. The experience provides interns with an opportunity to apply educational theories and subject area content to actual teaching experience under the guidance of a master teacher or teachers.
- 5318. ORIENTATION TO SCIENCE AND SOCIAL STUDIES. Selected strategies for teaching the disciplines of geography, history, economics, culture, government, citizenship, anthropology, and the effect of science and technology on society are explored. Scientific concepts and processes are introduced using an inquiry approach. In both sections of the course cooperative learning, integrated curriculum, and problem solving techniques are introduced. State and national standards are examined.
- 5351. TEACHING LANGUAGE ARTS AND READING IN THE ELEMENTARY SCHOOL. A survey of research-proven practices for the assessment and teaching of the language arts (listening, speaking, reading, composition) in elementary school settings. Includes a field experience at a local public school.

5352. C

English 115

- 5372. Reading Across Curriculum. Effective strategies for developing content literacy in students. Includes approaches to teaching content-specific vocabulary, strategies for reading content materials efficiently and with substantial comprehension, ways of improving reading fluency in nonfiction materials, establishing an effective classroom environment, composition applications, and grouping strategies. Includes a field experience with students.
- 5373, 5374. INTERNSHIP IN SECONDARY SCHOOL TEACHING. One full semester of student teaching in an accredited public or private school. The experience provides intems with an opportunity to apply educational theories and subject area content to actual teaching experience under the guidance of a master teacher or teachers.
- 5375. Internship Seminar. Designed for secondary student teachers sharing of ideas concerning such topics as assessment, classroom management, and teaching strategies with experts from area K-12 schools.

GIFTED AND TALENTED ENDORSEMENT

- 6325. EDUCATING THE GIFTED AD TALENTED. This course includes surveys of the history of the field, basic terminology and definitions, major models and theories, and effective program prototypes for gifted students. Students review characteristics of the gifted and talented and overview identification and assessment procedures for gifted students. Attention is given to analyzing the traits of effective teachers and counselors and to developing models for interaction with gifted students.
- 6347. CREATIVITY: THEORIES, MODELS, AND APPLICATIONS. This course surveys the concept of creativity. Topics covered include instruments and techniques for identifying creativity, theories and models of creativity, techniques for creativity enhancement, futuristics, and challenges unique to creative persons.
- 6397. Growth and Development of the Gifted. This course examines the differentiated affective characteristics and needs of the gifted, including a review of general counseling theories, effective communication skills with the gifted, and the assessment of affective needs. Students will develop strategies for assisting the gifted in developing social and interpersonal skills. Issues surrounding the potential of the gifted to achieve and make significant contributions to society as a whole are reviewed.
- 6388. Curriculum Development for Gifted and Talented Learner. This course builds the foundation for development of differentiated curricula for the gifted. Students study effective teaching strategies, learn how to adapt curriculum for individual differences, study the organization of curriculum and instruction for the gifted (scope and sequence, issues related to integrated and interdisciplinary curriculum, and grouping issues). Emphasis is placed on the teaching of higher-level cognitive skills within the disciplines.
- 6374 Practicum. Either a practicum experience and two years of successful classroom teaching experience in an approved program for gifted and talented students is required for endorsement. Students in this course will meet regularly with a faculty member to develop and enhance skills in teaching the gifted.

ENGLISH

Professor Foster, Department Chair

Professors: Crusius, Murfin, Myers, Neel, Smith (Director of Creative Writing), Spiegelman, Terry; Associate Professors: Arr (Vice Chair), Daniels, Holahan, Lawhon, Lewis, Newman (Director of Undergraduate Studies), Schwartz, Shepherd (Director of Graduate Studies), Shields, Wheeler (Director of Medieval Studies); Assistant Professors: Bozorth, Haynes, Satz, Travis, Williams; Adjunct Assistant Professor: Levy; Senior Lecturers: Channell, Cooper, Goyne (Director of First-Year Writing), Innocent, Lange, Stone; Lecturers: Barry, Berliner, Grumbles, Jackman, Kassanoff, Knight, Kuenzer, Pocklington, Read, Richardson, Watts.

The B.A. degree in English is appropriate for a general, liberal education, and for pre-professional training leading to graduate degrees in English or in other areas.

REQUIREMENTS FOR THE B.A. DEGREE. The major requires a minimum of 33 term hours of English courses, distributed as follows:

middle of the junior year, and a 3.50 average or better in courses fulfilling requirements for the major. In addition to all major requirements, candidates must elect ENGL 5349 (Seminar in Literary Theory) in the fall of the senior year. Candidates completing the seminar with a grade of B+ or better will then enroll in an Independent Studies course in which they will write a senior thesis, or in Directed Studies in Poetry or Fiction Writing for creative writing specialists. With special permission, a candidate may enroll instead in a Graduate Seminar. Candidates must earn a B+ or better in either option selected and attain a 3.50 G.P.A. in all English Department courses counting toward the major. Independent Studies, Directed Studies, or Graduate Seminars may be used to fulfill advanced-hour requirements for the major.

REQUIREMENTS FOR THE MINOR IN E

2303. Intermediate Expository Writing

- 3305. Major British Authors I: Chaucer through Pope. Introduction to earlier periods of English literature through the study of major authors in their historical context and from varied critical and thematic perspectives.
- 3306. Major British Authors II: Wordsworth through Yeats. Introduction to later periods of English literature through the study of major authors in their historical context and from varied critical and thematic perspectives.
- 3307. Major American Authors: Emerson through Hemingway. Introduction to later periods of American literature through the study of major authors in their historical context and from varied critical and thematic perspectives.
- 3309. Advanced Expository Writing. Emphasis on styles and formats appropriate to academic writing, and on individual problems and needs.
- 3310. THE DEVELOPMENT OF THE SHORT STORY. A history of the evolution of the forms and techniques of short fiction with special attention to developments in the 20th century.
- 3311. The English Novel I. A study of form and theme in selected works from the origins of the English novel to the beginning of the 19th century.
- 3312. The English Novel II. A study of form and theme in the work of selected novelists from the beginning of the 19th century through the 20th century.
- 3313. The American Novel I. A study of form and theme in the work of selected novelists from Cooper to James.
- 3314. THE AMERICAN NOVEL II. A study of form and theme in the work of selected novelists from James to Faulkner, Bellow, and beyond.
- 3315. The Development of Drama I. A study of the nature of drama and the dramatic in Western culture through representative texts from 5th-century B.C. Athens through 19th-century Germany. Some attention to contributing issues of theater history.
- 3316. THE DEVELOPMENT OF DRAMA II. American and European drama from 1880 to the present. Emphasis on literary values and movements, with cultural and historical backgrounds.
- 3317. FICTION AND FILM. Analysis of the form and technique of several novels with secondary attention to the effect upon "story" or content by selected film adaptations.
- 3318. Modern Poetry: Modern British and American poetry: Auden, Eliot, Frost, Moore, Pound, Stevens, and Yeats.
- 3319. Comedy. The development of dramatic comedy from classical models through the contemporary play, with consideration of historical influences.
- 3320. Tragedy. A critical examination and comparative study of the forms taken by the tragic drama of various cultures and historical periods.
- 3321. Medieval English Literature. Survey of a thousand years of English literature, from the Anglo-Saxon period, through the high Middle Ages and the works of Chaucer's contemporaries, to the late Middle Ages and the dawn of the Renaissance.
- 3322. LITERATURE AND MYTH. A study of myth as story, as content for literature, and as an analytic term.
- 3323. THE TALES OF WALES FROM THE TIME OF KING ARTHUR. Survey of native Welsh literature (in translation) from the sixth to the 20th century. Primary focus on medieval and Arthurian texts and their influence on the British and European literary imagination.
- 3325. HEROIC VISIONS: THE EPIC POETRY OF HOMER AND VERGIL. The literature of classical heroism in works by Homer and Vergil that influenced the epic traditions of English literature.

3330. Non-Western Culture and

- 3361. LITERATURE AND SOCIETY. The relationship of literature to various social concerns and contexts. Themes and writers studied will vary from term to term.
- 3362. LITERATURE AND BELIEF. Study of the expression in literature of ultimate concerns, such as faith, identity, nature, time, and mortality. Themes and writers will vary from term to term.
- 3363 (CF 3345). LITERATURE OF RELIGIOUS REFLECTION. Issues of faith and doubt in British and American literature, drawn from texts reflecting Christian humanism, secular rationalism, individualistic romantic faith, and scientific modernism and other modern alternatives.
- 3364 (FL 3364). PHILOSOPHICAL AND LITERARY IDEAS OF THE OTHER: THROUGH A GLASS DARKLY. An important question in Western intellectual tradition is "Who is the Other?" This course explores both dialectical and linguistic structures of the "I" and "the Other" in philosophy, literature, and politics.
- 3365. American Literature from 1900 to 1940. Beginnings of the modern spirit and development of new literary forms in the work of such authors as James, Stevens, Eliot, Frost, Faulkner, Hemingway, Cather, Wharton, and others.
- 3366. American Literature since 1940. Values and attitudes in transition in the work of major American writers of the past 50 years, such as Barth, Mailer, Pynchon, Walker, and Flannery O'Connor.
- 3367. AFRICAN AMERICAN LITERATURE. Major African American writers and their works, and various social and historical influences.
- 3368. LITERATURE OF THE SOUTHWEST. 19th- and 20th-century Anglo, Hispanic, and Native American literature of the Southwestern United States.
- 3369 (CF 3398). Jewish American Literature and Culture. An interdisciplinary introduction to Jewish culture through literature, especially in the American environment, as well as to the issues in studying any distinctive ethnic and cultural literature.
- 3370 (CF 3370). Women and the Southwest. A study and exploration of women writers, artists, and thinkers in the American Southwest and their vision of this region as singularly hospitable to women's culture.
- 3371. CHICANA/CHICANO LITERATURE. A broad examination of major 20th-century Mexican-American writers and their works in the context of various social, geographic, political, and historical influences. Some knowledge of Spanish will be helpful to students, but is not a prerequisite for the course.
- 3372. HISTORY OF U.S. HISPANIC LITERATURE. Historical overview examining the literary heritage of Hispanics within the United States borders, beginning with Spanish colonial explorers in the 17th century and continuing into the present. Some knowledge of Spanish will be helpful to students, but is not a prerequisite for the course.
- 3380. THE LITERATURE OF VISION. An examination of the ways in which prophets and imaginative writers have sought to communicate the source, content, and meaning of "things invisible to mortal sight," whether as a confirmation of, or a challenge to, the leading ideas of their time.
- 3391. Intermediate Poetry Writing. An intermediate course for those who have demonstrated competence and promise in writing poetry. *Prerequisite:* ENGL 2391 or permission of instructor
- 3392. INTERMEDIATE FICTION WRITING. An intermediate course for those who have demonstrated competence and promise in writing fiction. *Prerequisite:* ENGL 2392 or permission of instructor.
- 3398. ENGLISH STUDIES INTERNSHIP. For junior and senior English majors only. Work experience related to English studies. Instruction in professional communication. Workshop format, one-on-one consultation with instructor. *Prerequisite:* cIN6op 8 studi9i185nDeconwMNeime.

4000. Studies in Britain.

 $4339. \ Earlier\ Romantic\ Literature.\ An\ introduction\ to\ Romanticism,\ poetry\ and\ prose,\ with$

ENVIRONMENTAL SCIENCE

Coordinating Committee: Assistant Professor B. Jacobs (Geological Sciences), Chair; Professor LATTMAN (Chemistry); Professor UBELAKER (Biological Science); Professor Hansen (Geological Sciences).

CHEMISTRY: Professors: BIEHL, LATTMAN, MAGUIRE, WISIAN-NEILSON; Associate Professors: BUYNAK, FORD, GOODSON, HORSTHEMKE, SCHELL; Assistant Professor: Son. GEOLOGICAL SCIENCES: Professors: Gregory, Hansen, L. Jacobs, Stump, Walther, Yapp; Associate Professor: Goodge; Assistant Professor: B. Jacobs; Adjunct Associate Professor: D. Winkler. Biological Sci-ENCES: Professor: UBELAKER; Lecturer: GOODNIGHT.

The natural systems that constitute the Earth's environment are in continuous mutual interaction. These interactions occur on spatial scales that range from microscopic to global and on temporal scales that range from fractions of a second to millions of years. Scientific efforts to understand how the activities of humans affect the workings of such a complex arrangement must properly involve the identification and study of the fundamental processes operating at present in the Earth's environment. Furthermore, to apply such knowledge with skill, insight and perspective, information must also be acquired on the extent to which ancient environmental conditions on the Earth may have differed from those observed today, and how such changes affected life on the planet. An intellectual and practical scientific problem of such vast scope must be approached in an interdisciplinary manner. This interdisciplinary requirement is important not only for students who will become professional environmental scientists, but also for those who want a solid scientific foundation for post-graduate training in environmental law, public policy, business, and other fields.

The program includes a set of "core" courses that provide the student with the necessary background in chemistry, earth science, physics, biology and mathematics to move into either an earth science or a chemistry emphasis in the upper division courses. Students choose an emphasis in either Chemistry or Earth Science for upper level course work. Students with either emphasis will come together their senior vear in a multidisciplinary seminar in Environmental Science. Seniors may do an internship (e.g., with an environmental lawyer, an assessment and remediation company, or a nonprofit agency) for course credit and by special arrangement.

A total of 122 credits is required for a Bachelors of Science in Environmental Science, including 30 credits in General Education, 24 credits as Free Electives (can be 27 credits if the Information Technology requirement is satisfied with the Environmental Sciences Program), 50 credits of core courses, and 18 credits of Environmental Science electives taken with an emphasis in either Chemistry or Earth Science.

CORE COURSES (50 course credits)

Biology (7 credits):

BIOL 1402 Introductory Biology II

BIOL 3307 Ecology

Chemistry (15 or 16 credits):

CHEM 1303 GENERAL CHEMISTRY I

CHEM 1113 GENERAL CHEMISTRY I LABORATORY

CHEM 1304 GENERAL CHEMISTRY II

CHEM 1114 GENERAL CHEMISTRY II LABORATORY

CHEM 3371 ORGANIC CHEMISTRY I

CHEM 3117 ORGANIC CHEMISTRY I LABORATORY

and either

CHEM 3372 and 3118 Organic Chemistry I and Organic Chemistry II Laboratory or CHEM 3351 QUANTITATIVE ANALYSIS

Geological Sciences (11 credits):

GEOL 1301 EARTH SYSTEMS or

GEOL 1315 ENVIRONMENTAL SCIENCES

GEOL 3451 EARTH MATERIALS I

GEOL 3452 EARTH MATERIALS II

Mathematics (6 credits):

MATH 1337 CALCULUS I

MATH 1338 CALCULUS II

Physics (8 credits):

PHYS 1303 Introductory Mechanics and

PHYS 1105 GENERAL PHYSICS LABORATORY I or

PHYS 1407 GENERAL PHYSICS I

PHYS 1304 Introductory Electricity and Magnetism and

PHYS 1106 GENERAL PHYSICS LABORATORY II or

PHYS 1408 GENERAL PHYSICS II

Environmental Science (3 credits):

GEOL 6363 ENVIRONMENTAL GEOLOGY SEMINAR

CHEMISTRY EMPHASIS, UPPER-DIVISION COURSES (18 credit hours)

Required (9 or 10 credits):

CHEM 3359 INORGANIC CHEMISTRY I

CHEM 3372 and 3118 Organic Chemistry II and Organic Chemistry II Laboratory or

CHEM 3351 QUANTITATIVE ANALYSIS

CHEM 5381 Physical Chemistry or 5383 Physical Chemistry I

Electives (choose 9 or more credits):

CHEM 4197, 4297, or 4397 RESEARCH

CHEM 5390 Environmental Chemistry

GEOL 3366 Environmental Geology and Geochemical Cycles

GEOL 5384 Hydrogeology

GEOL 5386 GEOCHEMISTRY

GEOL 3353 MODERN AND ANCIENT CLIMATES

GEOL 5338 THERMODYNAMICS AND GEOLOGIC PROCESSES

ME 5317 GROUNDWATER HYDROLOGY AND CONTAMINATION

EARTH SCIENCES EMPHASIS, UPPER-DIVISION ELECTIVES (choose 18 credit hours)

CHEM 3351 QUANTITATIVE ANALYSIS

CHEM 3359 INORGANIC CHEMISTRY

CHEM 3372 and 3118 Organic Chemistry II and

ME 5317 GROUNDWATER HYDROLOGY AND CONTAMINATION
STAT 2331 or 4340 INTRODUCTION TO STATISTICAL METHODS or
STATISTICAL METHODS FOR ENGINEERS AND APPLIED SCIENTISTS

ETHNIC STUDIES

Professor Chávez, Director

Ethnic Studies offers an interdisciplinary program that examines the African-American and Mexican-American experiences through the social sciences and humanities. The program offers instruction in important periods of African, Mexican, and American history, probing the roots of traditions beginning in early African and pre-Columbian cultures, as well as examining minorities in contemporary U.S. society.

This program provides good preparation for graduate work in the social sciences, the humanities, and professional schools, as well as jobs and careers in many fields. Education, law, journalism, urban planning, business, social work, and politics are a few of the fields for which Ethnic Studies provides a strong background.

REQUIREMENTS FOR MAJORS AND MINORS. Under Ethnic Studies, the following options are offered:

The major leading to the Bachelor of Arts in Ethnic Studies with specialization in either African and African-American Studies (33 hours) or Mexican-American Studies (34 hours).

The major leading to the Bachelor of Science in Ethnic Studies with specialization in either African and African-American Studies (36 hours) or Mexican-American Studies (37 hours).

The minor in African and African-American Studies (18 hours).

The minor in Mexican-American Studies (19 hours).

Courses to fulfill the requirements for the above should be selected in consultation with the director.

- I. Bachelor of Arts. The B.A. option focuses more on the humanities than the social sciences and, consequently, requires less work in methodology and statistics.
 - A. Foundation. Six hours required of all students majoring in Ethnic Studies. ETST 2301 Race and Ethnicity in the United States

SOCI 3370 MINORITY-DOMINANT RELATIONS

- B. Basic Courses. Eighteen hours comprised of the minor in African and African-American Studies, and 19 hours comprised of the minor in Mexican-American Studies form the basis of the Ethnic Studies major.
 - 1. African and African-American Studies minor (nine of the 18 hours required must be at the 3000 level or above):
 - a. Nine hours of core courses are required.

HIST 2392 Modern Africa

HIST 3313 BLACKS 38.68 Tm TsHnO6 01.0072 8 0cCSj 8 (LACKS)Tj 8 0 31H0 8 17 Ethnicnfert

- 2. Mexican-American Studies minor (10 of the 19 hours required must be at the 3000 level or above):
 - a. Ten hours of core courses are required.

HIST 3324 Mexican Americans, 1848 to the Present

SOCI 3372 CHICANOS IN THE SOUTHWEST

SPAN 1401 BEGINNING SPANISH (or higher level)

b. Nine hours of additional basic courses selected from the following:

ANTH 3312 Meso-American Archaeology

ARHS 3369 ANCIENT MAYA

ARHS 3379 AZTECS BEFORE AND AFTER CONQUEST

ENGL 3371 CHICANO/CHICANA LITERATURE

ENGL 3372 HISTORY OF U.S. HISPANIC LITERATURE

FL 3306 CHICANO CULTURAL HERITAGE

HIST 3305 HISPANOS OF NEW MEXICO, 1848-PRESENT

HIST 3308 HISTORY OF HISPANICS IN THE UNITED STATES THROUGH FILM

HIST 3382 HISTORY OF MEXICO

HIST 5330, 5331 Seminar in Mexican-American History

- C. Cross-Cultural Requirement. Ethnic Studies majors in the African and African-American option are required to take three hours in Mexican-American Studies. Majors in the Mexican-American Studies option are required to take three hours in African-American Studies.
 - D. Supporting Courses. Six hours of other courses related to ethnicity must be selected from the following:

ANTH 3348 ASIANS AND THE AMERICAN PUBLIC IMAGINATION

ANTH 3353 Indians of North America

ANTH 3361 LANGUAGE IN CULTURE AND SOCIETY

ANTH 3368 (SOCI 3368) Urban Problems: A Cross-Cultural Perspective

ENGL 1365 LITERATURE OF MINORITIES

ENGL 3330 Non-Western Culture and Literature: Africa, the Caribbean, South Asia

ENGL 3331 GENDER, RACE, AND CLASS: NON-WESTERN CULTURE AND LITERATURE

ENGL 3369 Jewish American Literature and Culture

ETST 2305 Internship in Ethnic Studies

HIST 2380 ETHNIC REGIONS IN THE "WESTERN WORLD"

PLSC 4337 CIVIL RIGHTS

RELI 3324 THE JEWISH EXPERIENCE IN AMERICA

II. BACHELOR OF SCIENCE. Thirty-six hours are required to complete the B.S. option in African and African-American Studies. Thirty-seven hours are required to complete the B.S. option in Mexican-American Studies. The same pattern of courses is required as for the B.A. degree with the addition of six hours of required methods courses, three of which may substitute for three hours of supporting courses:

SOCI 4311 RESEARCH METHODS and

STAT 2301 Statistics for Modern Business Decisions or

STAT 2331 Introduction to Statistical Methods

EVENING BACHELOR OF HUMANITIES PROGRAM

Adjunct Professor Kosmitzki, Director

The Bachelor of Humanities is a multidisciplinary evening program designed for students who wish to complete their undergraduate education in the evening on a part-time basis. Applicants must have earned at least 45 term hours of transferable course work with a 2.50 G.P.A. and meet the University's admission requirements for transfer students.

The degree requires the completion of 36 term hours in course work taken from the following disciplines: art history, English literature, foreign languages, history, philosophy, and religious studies. Up to 45 term hours of electives may be earned.

For details concerning admission and program requirements, contact the Evening Studies Office, Southern Methodist University, 6410 Airline Road, PO Box 750382, Dallas TX 75275-0382; 214-768-6483. World Wide Web: www.smu.edu/~dess

EVENING BACHELOR OF SOCIAL SCIENCES PROGRAM

Adjunct Professor Kosmitzki, Director

The Bachelor of Social Sciences is a multidisciplinary evening program designed for students who wish to complete their undergraduate education in the evening on a part-time basis. Applicants must have earned at least 45 term hours of transferable course work with a 2.50 G.P.A. and meet the University's admission requirements for transfer students.

The degree requires the completion of 36 term hours in course work taken from the following disciplines: psychology, sociology, economics, anthropology, and political science. Up to 45 term hours of electives may be earned.

For details concerning admission and program requirements, contact the Evening Studies Office, Southern Methodist University, 6410 Airline Road, PO Box 750382, Dallas TX 75275-0382; 214-768-6483. World Wide Web: www.smu.edu/~dess

FOREIGN LANGUAGES AND LITERATURES

Associate Professor Beauchamp, Department Chair

Chinese: Assistant Professor: C56Tw (Assistant Pro.E4 s9 Tw R 91anthropology, ern)Tj 3.7242dman C03 fe

CHINESE

REQUIREMENTS FOR THE MINOR IN CHINESE: Seventeen term hours, including 14 hours of language training, beginning with the intermediate level, as well as one FL course in Chinese culture, or one from History or Political Science, as follows:

- 1. CHIN 2401 and 2402
- 2. CHIN 3311 and 3312
- 3. One course from the following: FL 3310, 3312, 3325; HIST 3393; or PLSC 3352

THE COURSES (CHIN)

1401, 1402. Beginning Chinese. Introduction to spoken and written Mandarin Chinese. Course emphasizes intensive drills in sounds and tones, sentence structure, and a vocabulary of 500 characters. Students attend three weekly master classes plus two hours of practice in small groups. Computer, video, and audio assignments are required. Four credits per term. *Prereq*-

- 2201. France Today: Culture, Society, Daily Life. In conjunction with FREN 2401, a systematic exploration of diverse aspects of French life, involving both classroom study and on-site investigation. Emphasis on contextual language acquisition, both written and oral. *Prerequisite*: Permission of program director. (SMU-in-the-South of France only)
- 2401. Intermediate French. Continues to strengthen the four language skills, with added emphasis on reading and writing. Five classes per week. Four credits per term. *Prerequisite: C-* or better in FREN 1402 or permission of area chair.
- 3101. French Phonics. Perfecting French pronunciation: individual sounds, word groups, rhythmic patterns, intonation. Use of audiocassettes and interactive software. *Corequisite:* FREN 3355. *Prerequisite:* FREN 2401.
- 3355. ADVANCED FRENCH I. Refinement of all four language skills. Special emphasis on conversation, particularly in the following areas: common social situations, narration, reporting in indirect discourse, expository oral presentation. Includes grammar review. Outside reading, compositions, use of audio and videocassettes. *Corequisite*: FREN 3101. *Prerequisite*: FREN 2401.
- 3356. Advanced French II. Refinement of all four language skills. Special emphasis on writing proficiency, particularly in the following areas: exposition, narration, description, correspondence, literary analysis. Includes grammar review, oral presentations, dictionary research, outside reading. *Prerequisites:* FREN 3101 and 3355.
- 4355. Advanced Spoken French. Practice in styles and genres of spoken French: exposé, literary explication, persuasion, recitation, formal versus informal conversation. *Prerequisites*: FREN 3355 and 3356.

4356. ADVANCED

5320, 5321. LITERARY PERIODS. The study of a variety of authors and works with respect to the ways in which they define and reflect the literary, political, and social aspects of a given historical period. Specific topics vary. *Prerequisites:* FREN 4370 and two of the following courses: FREN 4379, 4380, 4381.

5334, 5335, GENRE STUDIES. The examination of the works of several authors as a means of understanding the nature and evolution of a particular genre. Specific topics vary. *Prerequisites*: FREN 4370 and two of the following courses: FREN 4379, 4380, 4381.

5344, 5345. LITERARY MOVEMENTS. The exploration of the conventions that shape a specific movement through a reading of representative texts by various authors. Specific topics vary. *Prerequisites*: FREN 4370 and two of the following courses: FREN 4379, 4380, 4381.

5350, 5351. PROBLEMS IN FRENCH LITERATURE. The definition of a particular theme as elaborated by a group of writers, usually covering different time periods and genres. Specific topics vary. *Prerequisites*: FREN 4370 and two of the following courses: FREN 4379, 4380, 4381.

5380, 5381. Tutorial for Juniors and Seniors. By invitation of the entire area only. Special project set up with the help of the area chair.

Foreign Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section. These courses do not count toward the French major. They are electives.)

FL 3359. MASCULINITIES: LITERARY IMAGES AND PERSPECTIVES.

FL 3361. Special Topics: French Literature in Translation. (SMU-in-Paris only)

FL 3363 (CF 3347). FIGURING THE FEMININE.

FL 3365, 3366. Special Topics: French Literature in Translation.

GERMAN

All courses are conducted in German.

REQUIREMENTS FOR THE B.A. DEGREE: Thirty term hours, including GERM 2311 and 2312 (second-year German) and 24 term hours of advanced courses. Courses are to be selected in consultation with the major adviser and must include the following:

- 1. Proficiency in written and spoken German demonstrated by course work in GERM 3311 (German Conversation and Composition) and in GERM 3312 (German Composition and Conversation). GERM 3313 (Readings and Composition: Austrian Newspapers) may be substituted for 3312 with the approval of the major adviser. Students who consider themselves proficient in any or all of these courses may petition to substitute other courses from the offerings of the major.
 - 2. German 3320 (Contemporary German Culture).
- 3. Three courses from the following core literary sequence: 3330 (German Narrative I), 4310 (German Poetry), 4320 (German Drama), 4330 (German Narrative II).
- 4. Two courses from the following electives: 3350 (Commercial German), 4340 (The Radio Play), 5310 (Goethezeit), 5320 (Laughter and Comedy), 5330 (The Perception of Self).

Study in the SMU-in-Austria summer program or in an approved term or junioryear program in a German-speaking country is highly recommended. Suggested electives outside the German Area: a second foreign language; extradepartmental courses listed under the German Area Studies major; literary criticism; other foreign literature in translation; English and American literature; courses in linguistics, semiotics, or philology; courses in German art history, philosophy, or history.

REQUIREMENTS FOR THE B.A. DEGREE IN GERMAN AREA STUDIES: Thirty term hours, including GERM 2311 and 2312 (second-year German), and 24 hours of advanced courses. Courses are to be selected in consultation with the major adviser and must include the following:

18 hours in German:

- 1. GERM 2311, 2312
- 2. GERM 3311
- 3. GERM 3312 or GERM 3313
- 4. Two additional advanced courses

12 hours in area courses:

- 1. One of the following: FL 3367, 3368, 3369, or 3371.
- 2. HIST 4363 or 4369
- 3. Six hours from the following list of courses or from other German Area Studies courses approved by the German Area:

HIST 5373, 5374 PHIL 3370 RELI 3321, 3322 FL 3376 ARHS 2351, 3382, 4359, 5353 CAPS 3318, 3352

REQUIREMENTS FOR THE MINOR IN GERMAN: Eighteen term hours of German, including 2311 and 2312 (second-year German) and 12 advanced hours as follows:

- GERM 3311
- 2. GERM 3312 or 3313
- 3. GERM 3320 or GERM 3350
- 4. One additional advanced course chosen in consultation with the adviser.

REQUIREMENTS FOR THE MINOR IN GERMAN AREA STUDIES: Eighteen term hours, including GERM 2311 and 2312 (second-year German), and 12 advanced hours as follows:

- 1. GERM 3311
- 2. GERM 3312, GERM 3313, or GERM 3350
- 3. FL 3369 or HIST 4363 or HIST 4369
- 4. One additional advanced area studies course chosen in consultation with the adviser

German Language Courses (GERM)

- 1101. Conversational Practice in German. An introduction to the German sound system and systematic practice of simple speech patterns. (Normally offered during the summer at the SMU-in-Austria program.)
- 1303. Basic Conversation. Systematic description of speech patterns and of carefully designed discussion models for students with no prior knowledge of German. (SMU-in-Austria only.)
- 1401, 1402. Beginning German. Stresses acquisition of basic skills: Speaking, aural comprehension, reading, and writing. Classes meet five hours a week. Computer assignments required. Four credits per term. *Prerequisite for 1402: C-* or better in 1401 or permission of area chair.
- 2101. Conversational Practice in German. Systematic practice of speech patterns and simple discussion models as well as rapidity drills and free delivery practice. *Prerequisite:* GERM 1402 or the equivalent, or permission of instructor.
- 2311, 2312. Second-Year German. Discussions and compositions based on literary and cultural texts. Review of grammar. Language laboratory. *Prerequisite for 2311: C-* or better in GERM 1402 or permission of area chair. *Prerequisite for 2312: C-* or better in 2311 or permission of area chair.
- 3311. German Conversation and Composition. An advanced course intended to increase active command of the language. Utilizes a variety of short modern texts. *Prerequisite:* GERM 2312 or the equivalent.

- 3312. German Composition and Conversation. Discussion of short contemporary texts; compositions on personal topics. Selective study of grammar. *Prerequisite*: GERM 3311 or permission of department.
- 3313. Readings and Compositions: Austrian Newspapers. A survey of selected Austrian newspapers and magazines as a means of acquainting students with Austrian culture while perfecting their German language skills. Analysis in content, form, style; written assignments and grammar review. (SMU-in-Austria only) *Prerequisite:* GERM 2312 or equivalent.
- 3350. Commercial German for International Trade. An advanced course in German for international trade and communication. *Prerequisites:* GERM 3311 and 3312 or 3313, or permission of instructor.

German Literature Courses

- 3320. Contemporary German Culture. An exploration of the German culture scene through magazine and newspaper articles, short stories, television and films from the post-war era to the present. *Prerequisite:* GERM 3312 or permission of instructor.
- 3330. 20th-Century Stories, Narratives, and Short Novels: German Narrative I. Short narrative forms from the beginning of the 20th century to the present: Mann, Kafka, Brecht, Böll, Seghers, Bachmann, Wolf, and others. Includes consideration of two post-war German literatures (the German Democratic Republic and the Federal Republic). *Prerequisite:* GERM 3312 or permission of instructor.
- 4310. German Lyric Poetry From the Middle Ages to the Present. Historical survey of poetic forms from medieval *Minnesang* through the Baroque and *Sturm und Drang* to Classicism, Romanticism, and 20th-century styles. *Prerequisite:* GERM 3312 or permission of instructor.
- 4320. THE MODERN DRAMA OF GERMANY, AUSTRIA AND SWITZERLAND. Critical reading of dramatic works by major German, Austrian and Swiss authors, with some attention to critical theory: Büchner, Schnitzler, Brecht, Dürrenmatt, Aichinger, Bachmann, Müller, Jelinek, and others. *Prerequisite:* GERM 3312 or permission of instructor.
- 4330. 19TH-CENTURY STORIES, FAIRY TALES, AND NOVELLAS: GERMAN NARRATIVE II. Short narrative forms from Romanticism through Realism to fin-de-siècle Vienna: Grimm, Eichendorff, Kleist, Storm, Schnitzler, and others. *Prerequisite*: GERM 3312 or permission of instructor.
- 4340. THE RADIO PLAY. Selections from the Golden Age of the German *Hörspiel*: Borchert, Böll, Dürrenmatt, Aichinger, Bachmann, Jandl, Mayröcker, and others. *Prerequisite*: GERM 3312 or permission of instructor.
- 5310. Goethezeit. Narrative, poetry and drama representing the German Enlightenment, *Sturm und Drang*, Classicism and Romanticism: Lessing, Goethe, Schiller, Kleist, Novalis, and others. *Prerequisite*: GERM 3320 or 3330, or permission of instructor.
- 5320. Laughter and Comedy. Laughter and its relation to humor, wit, and satire in comic German literature. Keller, Kleist, Lessing, Busch, Tucholsky, Kästner, and others. *Prerequisite:* GERM 3320 or 3330, or permission of instructor.
- 5330. THE PERCEPTION OF SELF IN GERMAN LITERATURE. Poems, essays, and novellas dealing with the perception of self, from the middle ages to modern times. Walther, Fleming, Lichtenberg, Kleist, Goethe, Hesse, Mann, and others. *Prerequisite:* GERM 3320 or 3330, or permission of instructor
- 5380. DIRECTED STUDIES. Permission of department.

Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)

- FL 3369 Perspectives on Modern Germany
- FL 3371 Trends in Austrian Literature and Culture
- FL 3376 Representations of Women in Modern Literature

Literature Courses

- 4323. Modern Italian Literature II. From the latter half of the 19th Century to World War I. Realism, Decadentism, and the Grotesque. Authors studied are Verga, D'Annunzio, Pirandello. *Prerequisite*: ITAL 2401.
- 4324. Contemporary Italian Literature. The Fascist Period and World War II. Introspection, society and the problem of evil: Moravia, Pavese, Bassani, Buzzati, and Ginzburg. *Prerequisite*: ITAL 2401.
- 4368. Italian Authors: Contemporary. Prerequisite: ITAL 2401.
- 4381, 4382. Tutorial for Juniors and Seniors: Directed Readings and Research. Directed reading and research in specific literary topics or writers. *Prerequisite:* ITAL 3357 or permission of instructor.

Italian Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)

FL 2395, ITALIAN CULTURE.

FL 3390. (CCCN 3390) ITALIAN CINEMA.

FL 3391. Special Topics: Italian Literature in Translation.

FL 3392. Special Topics: Italian Literature in Translation.

JAPANESE

REQUIREMENTS FOR THE MINOR IN JAPANESE: 17 term hours as follows:

Ι.	Intermediate Japanese (2401, 2402)	8 hours		
2.	Advanced Japanese (3311, 3312)	6 hours		
3.	Postwar Japan: Culture and Society (FL 3320)	3 hours		
REQUIREMENTS FOR THE MINOR IN JAPANESE AREA STUDIES: 17 term hours as follows:				
1.	Intermediate Japanese (2401, 2402)	8 hours		

Intermediate Japanese (2401, 2402)
 Postwar Japan: Culture and Society (FL 3320)

3 hours

3. Two other Japan-related courses

6 hours

THE COURSES (JAPN)

- 1401, 1402. Beginning Japanese. Emphasis on conversational skills. Introduction to reading and writing, including Hiragana and Katakana syllabaries and some basic Kanji. Three foundations classes will be accompanied by two one-hour applications sessions per week. Language laboratory required. Four credits per term. *Prerequisite for 1402: C-* or better in 1401 or permission of area chair.
- 2401, 2402. Intermediate Japanese. Emphasis on conversational skills. Introduction to reading and writing paragraphs with more Kanji in addition to Hiragana and Katakana. Three foundations classes will be accompanied by one one-hour applications session per week. Language laboratory required. Four credits per term. *Prerequisite for 2401: C-* or better in JAPN 1402 or permission of area chair. *Prerequisite for 2402: C-* or better in 2401 or permission of area chair.
- 3311. Third-Year Japanese. An introduction to contemporary Japanese society and culture through selected articles and videotapes. Students will perfect their Japanese language skills by means of discussion, oral and written assignments, and grammar review. *Prerequisite:* JAPN 2402.
- 3312. Third-Year Japanese (second term). While focusing primarily on sophistication of oral/ aural competence, the course aims at development of writing and refining skills for daily use. Through extensive conversational lessons, oral presentations, reading of authentic Japanese scripts, students acquire communicative strategies as well as ability to use refined honorific forms in appropriate cultural context. Three hours per week and one hour language laboratory. Three credits per term. *Prerequisite:* JAPN 3311 or equivalent.

Japanese Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures Section.)

FL 3320. Postwar Japan: Culture and Society.

FL 3348. Women in Japanese Culture and Society.

LATIN

1401, 1402. Beginning Latin. Structures of the Latin language – vocabulary, grammar, syntax. Introduction to Roman history and culture. Simple readings from Latin authors. *Prerequisite for 1402: C-* or better in 1401.

2311, 2312. Second-Year Latin. Readings from Cicero, Livy, Ovid, and Pliny. Passages from the Vulgate, excerpts from medieval authors. *Prerequisite for 2311: C-* or better in LATN 1402. *Prerequisite for 2312: C-* or better in 2311.

RUSSIAN

REQUIREMENTS FOR THE B.A. DEGREE IN RUSSIAN LANGUAGE: Thirty term hours, including RUSS 2341, 2351, 3341, 3351, 4311, and 15 hours of elective upper-level Russian language credit, at least nine hours of which must be taken through one of SMU's exchange programs in Russia.

REQUIREMENTS FOR THE B.A. DEGREE IN RUSSIAN AREA STUDIES: Thirty term hours, including RUSS 2341, 2351, 3341 (or 3361), 3351 (or 3362), 4311; FL 3323 (or RUSS 3323); FL3311; HIST 5367; one of the following: HIST 3340, 3341, or 5368; one of the following: PLSC 3358, PLSC 3359, or PLSC 3384.

REQUIREMENTS FOR THE MINOR IN RUSSIAN LANGUAGE: 15 term hours in Russian, as follows: RUSS 2341, 2351, 3341 (or 3361), 3351 (or 3362), 4311.

REQUIREMENTS FOR THE MINOR IN RUSSIAN AREA STUDIES: 15 term hours, including RUSS 2341, 2351; and three advanced area courses, one each in the areas of Literature (FL 3323 or 3331), History (HIST 3340, 3341, 5367, or 5368), and Political Science (PLSC 3358, 3359, or 3384).

THE COURSES (RUSS)

1401, 1402. BEGINNING RUSSIAN. An overview of the structures of the Russian language, with emphasis on skills of comprehension, speaking, reading, and writing. "Foundations" sections

- 3361, 3362. Comparative Grammar of Russian and English. For students who are fully bilingual in Russian and English, these courses provide a practical analysis of the similarities and differences between the two languages. Special problems of native speakers of Russian speaking English. Translation in both directions. Weekly compositions and translations, essay exams. *Prerequisite* (3361): 16 hours of Russian by examination. *Prerequisite* (3362): RUSS 3361 or permission of area chair.
- 4301. Advanced Conversation. (Moscow or St. Petersburg, term)
- 4302. ADVANCED PHONETICS. (Moscow or St. Petersburg, term)
- 4311. Advanced Readings in Russian Literature I. *Prerequisite or Corequisite:* RUSS 3341 and 3351 or permission of instructor.
- 4312. Advanced Readings in Russian Literature II. *Prerequisite*: RUSS 4311 or permission of instructor.
- 4313. ADVANCED COMPOSITION. (Moscow or St. Petersburg, term)
- 4314. Translation. (Moscow or St. Petersburg, term)
- 4324. The Soviet Press. (Moscow or St. Petersburg, term)
- 4332. Advanced Russian Literature. (Moscow or St. Petersburg, term)
- 4380, 4381. DIRECTED STUDIES.

Russian Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)

- FL 2343. AFTER COMMUNISM.
- FL 3323 (HIST 2323). Russian Culture.
- FL 3331. Survey of Russian Literature in Translation.
- FL 3332. Special Topics: Russian Literature in Translation.

SPANISH

REQUIREMENTS

REQ9 0 01Tc 88 Tm 0 Tc ()Tj 6.3 o0 0 8 26 01Tc 5. 6.gqsLa:2 0 01T.320 81oO7 Tc (

THE COURSES (SPAN)

1401. Beginning Spanish. Stresses acquisition of basic skills: speaking, aural comprehension, reading, and writing. Students attend three one-hour fundamentals classes plus two one-hour practice sessions per week. Computer, video, and audio assignments in the Foreign Language Learning Center (FLLC) are required. Four credits per term.

General Survey Courses

- 5310. Spanish Literature Before 1700. An introduction to Spanish prose, drama, lyric, and narrative poetry through the Golden Age.
- 5311. Spanish Literature Since 1700. Major writers and movements from 1700 to the present.
- 5315. Spanish American Literature to 1888. Literary figures and trends from the Conquest to Modernism. Meets Human Diversity co-requirement.
- 5316. SPANISH AMERICAN LITERATURE SINCE 1888. Literary figures and trends from Modernism to the present. Meets Human Diversity co-requirement.
- 5317. THE LITERATURE OF MEXICO. Readings and discussions of the works of major Mexican writers. Meets Human Diversity co-requirement.

- and the unique body of literature it has produced, including its very high proportion of surrealist, absurdist art and unique types of fantasy and science fiction literature. Departmental writing-intensive seminar.
- FL 2343. AFTER COMMUNISM. Examines changes in Russian and East European culture since the mid-1980s, when openness and restructuring prepared the ground for the fall of the Soviet Union.
- FL 2395. ITALIAN CULTURE. Significant aspects of Italian culture and thought, beginning with the age of Dante, are presented from poetry, prose, drama, journalism, architecture, the fine arts, music, and film. There are no prerequisites for the course.
- FL 3303. Spanish Civilization. Significant aspects of Spanish culture are presented and illustrated by examples from Spain's history, music, art, architecture, literature, folklore, and contemporary life. Course may be taken as SPAN 3373 if the student does his or her work in Spanish. (Offered at SMU-in-Spain.)
- FL 3305. Special Topics: Latin American Literature in Translation. Reading of masterworks of Latin American authors. Readings will vary from term to term and will be selected for their relevance to a particular period, genre, or theme. Meets Human Diversity co-requirement.
- FL 3306. The Heart of Aztlán: Chicano Literature of the Southwest. A study of the Chicano/mestizo cultural identity in the Southwest, the course includes readings from selected contemporary authors as well as from the early recorded contacts between Native Americans and their European conquerors. Meets Perspectives requirement for Literature and Human Diversity co-requirement.
- FL 3307 (CF 3329). THE BELLE EPOQUE AND THE BIRTH OF MODERNITY

- FL 3335 (CF 3335, HIST 3335). One King, One Law: France 1500-1789. This course examines the culture of France through its history and literature. It emphasizes historical developments, ideas and literary texts that define and illuminate French Classicism and absolutism. The course focuses on the early modern period, when France set the cultural tone and made significant contributions to the transformation of Western civilization. The course also provides a foundation for understanding subsequent European history and literary movements.
- FL 3340. Semiotics and Interpretation. Semiotics is the study of how meaning is produced and communicated. This course explores semiotic approaches to the interpretation of the most complex of all human communications: literary texts. Meets Perspectives requirement for literature.
- FL 3348 (CF 3348, SOCI 3348). Women in Japanese Culture and Society. Examines various women's issues in Japan through social science, literature, literary works, and contemporary films from interdisciplinary perspectives. Assesses changing women's status and roles in family, education, employment, mass media, and political organizations in the context of the contemporary feminist movement. Meets Human Diversity co-requirement.
- FL 3349 (CF 3349, HIST 3392). LITERATURES OF NEGRITUDE AND HISTORIES OF THE STRUGGLE FOR BLACK LIBERATION. Black literature played an important role in bringing on the collapse of the European colonial order, and it remains a major force in the struggle against neocolonialism today. This course explores links between literature and politics, literature and history, and thought and action in 20th-century Africa and the Caribbean. Readings and lectures will be supplemented by class discussion, films, and videotapes about the Caribbean and Africa. Meets Human Diversity co-requirement.
- FL 3359. MASCULINITIES: LITERARY IMAGES AND PERSPECTIVES. The representation of male sex roles in Western literature, from Achilles to James Bond. Open to juniors and seniors; sophomores by permission of instructor. Meets Perspectives requirement for Literature.
- FL 3361. Special Topics: French Literature in Translation

GEOLOGICAL SCIENCES

Professor McAlester, Department Chair

Professors: Blackwell, Gregory, Hansen, Herrin, Holdaway, L. Jacobs, Stump, Walther, Yapp; Associate Professor: Goodge; Assistant Professor: B. Jacobs; Adjunct Associate Professors: Fiorillo, A. Winkler, D. Winkler; Adjunct Assistant Professor: Oliver.

The Geological Sciences provide ways of understanding and appreciating dynamic earth processes, our physical environment, and our place in the long and complex history of the planet and solar system. They also provide the background for rewarding careers in industry, government, and academia. Our faculty offer exceptional learning and research opportunities in geology, geochemistry, geophysics, environmental geology, planetary geology, and paleontology.

The geosciences attract students with broad interests in earth science, chemistry, biology, environmental science, archaeology, physics, astronomy, oceanography, applied mathematics, or engineering. Our department strongly encourages combined

Required support courses – 9 hours minimum:

- 1. CHEM 1301 or 1303 3 hours
- 2. PHYS 1301, 1303 (recommended), 1313, or 1407 3 hours minimum
- 3. MATH 1337 3 hours

NOTE: Participation in a recognized geology summer field camp is strongly recommended for *all* majors (B.A. and B.S.). Most geology graduate programs in the United States require that a field course be completed.

REQUIREMENTS FOR THE B.S. DEGREE. A minimum of 36 or 38 hours in geology, selected from the following:

- 1. One course chosen from GEOL 1301, 1305, 1307, 1308, 1313, or 1315 3 hours
- 2. GEOL 3340 (Face of the Earth); 3451, 3452 (Earth Materials I and II); 3454 (Structural Geology) 15 hours
- 3. Four geology electives at the 3000 level or above 12 hours minimum
- 4. Geology Field Studies (one course chosen from GEOL 3240, 3241, 3242, or 3243) 2 hours
- 5. GEOL 4296 and 4298 (Integrative Research), or 4657 (Field Geology) 4 or 6 hours

Required support courses – 17 hours minimum:

- 1. CHEM 1303, 1113, 1304, 1114; or 1307, 1113, 1308, 1114 8 hours
- 2. PHYS 1303 (recommended) or 1407 3 hours minimum
- 3. MATH 1337, 1338 (CALCULUS I and II) 6 hours

NOTES:

- Participation in a recognized geology summer field camp is strongly recommended for *all* majors (B.A. and B.S.). Most geology graduate programs in the United States require that a field course be completed.
- 2. Experience with a modern scientific computing language is essential. This experience can be gained in a course such as GEOL 3159 (COMPUTER METHODS IN THE GEOLOGICAL SCIENCES).
- The requirements for the major are considered minimal. Students planning careers in the earth sciences should take additional course work according to the geoscience emphasis that best fits their goals. Consult a faculty adviser for suggestions.

MINOR IN GEOLOGY

REQUIREMENTS FOR THE MINOR. A minimum of 17 hours in Geology, selected from the following:

- 1. One course chosen from GEOL 1301 (Introduction to Geology), 1305 (Oceanography), 1307 (Solar System), 1308 (Evolution and Life History), or 1315 (Introduction to Environmental Sciences) – 3 hours
- 2. Four geology electives at the 3000 level or above 12 hours minimum
- 3. Geology Field Studies (one course chosen from GEOL 3240, 3241, 3242, or 3243) or a geology elective at the 3300 level or higher, if not used to meet the

REQUIREMENTS FOR THE B.S. DEGREE: A minimum of 33 hours in Geological Sciences, selected from the following:

- 1. One course chosen from GEOL 1301, 1305, 1307, 1308, or 1315 3 hours
- 2. GEOL 3451, 3452 (EARTH MATERIALS I and II) 8 hours
- 3. GEOL 3454 (Structural Geology), 5320 (Dynamic Earth I), and 5392 (Introduction to Seismology) 10 hours
- 4. Four Geological Science electives at the 3000 level or above, one of which must be in Geophysics 12 hours minimum

Required support courses – 30 hours minimum:

- 1. CHEM 1303, 1113; or 1307, 1113 4 hours
- 2. PHYS 1303, 1105; 1304, 1106 (recommended); or 1407, 1408 8 hours
- 3. MATH 1337, 1338, 2339 (CALCULUS I, II, III); 2343 (D

NOTES:

- 1. Experience with a modern scientific computing language is essential. This experience can be gained in a course such as GEOL 3159 (Computer Methods in the Geological Sciences).
- The requirements for the Environmental Geology major are considered minimal. Consult a faculty adviser for recommendations on additional course work that best fits your goals.

MINOR IN ENVIRONMENTAL EARTH SCIENCES

The Minor in Environmental Earth Sciences is designed with a two-course geology core as background to an interdisciplinary course of study. The minor is freestanding and is not intended to feed into a major. Instead, it should provide an excellent and substantive background for students heading into the environmental field from other disciplines. The minor is not suitable for a student majoring in the Geological Sciences. The Department of Geological Sciences is responsible for administration of this minor.

REQUIREMENTS FOR THE MINOR: A minimum of 18 hours, to be selected from the following*:

- 1. One course chosen from GEOL 1301 (EARTH SYSTEMS), 1305 (OCEANOGRAPHY), 1307 (SOLAR SYSTEM), or 1308 (EVOLUTION AND LIFE HISTORY) 3 hours
- One course chosen from GEOL 1315 (Introduction to Environmental Science), 3340¹ (Face of the Earth), 3353² (Modern and Ancient Climates), 3363 (Environmental Geology Seminar), or 3366² (Environmental Geology and Geochemical Cycles) – 3 hours
- 3. Four courses to be selected from the following list -12 hours:

GEOL 3330, 3340, 3353, 3363, 3366 (if not used to meet the requirement listed above)

BIOL 1305 Our Natural Environment**

BIOL 3307³ Ecology

BIOL 33423 THE PLANT KINGDOM

BIOL 33433 FIELD BOTANY**

SEAS: ME 1304 CONTROL OF ENVIRONMENTAL POLLUTION

SEAS: SSH 5311 Environmental and Hazardous Waste Law

CF 2317 GLOBAL PERSPECTIVES ON ENVIRONMENTAL IO 9n06e 264.36 TmO6.3w9louAFh

1307. The Solar System. A study of the formation and evolution of the solar system. Discussion of solar system materials, nebular processes, meteorites, the formation and evolution of the planets and their satellites, the origin of stars, and the evidence for the standard model of cosmology. Two lectures and one two-hour laboratory each week.

1308. Evolution and Life History

- 3363. Environmental Geology Seminar. This seminar will focus on timely geoscience-based environmental problems and address scientific, environmental, political, economic, legal, and social aspects of potential "solutions" through selected readings, seminars, guest speakers, and research projects. *Prerequisites*: One 1300-level Geology course or permission of instructor.
- 3366. Environmental Geology and Geochemical Cycles. An introduction to the physical and chemical processes occurring in the earth's atmosphere, oceans, rivers, and groundwater at both a local and a global scale. *Prerequisites*: High school algebra and chemistry and one 1300-level course in Geological Sciences.
- 3369. Paleobiology. A survey of biological diversity, phylogenetic analysis, rates of evolution, extinction, biogeography, taphonomy and paleoecology. *Prerequisite:* One 1300-level course

- 5368. PALEOECOLOGY. Interactions between the living world and the earth's changing environments through geologic time. *Prerequisite*: GEOL 3369 or permission of instructor.
- 5370. Global Change. An introduction to relatively short-term geologic changes in Earth's environments. Tempo and mode in the three principal sources of such changes extraterrestrial events, variations in the earth's internal dynamo, and the evolving ocean-atmosphere-biosphere system will be emphasized. *Prerequisite:* GEOL 3452 or permission of instructor.
- 5380. Principles of Stratigraphy. Evolution and application of modern stratigraphic concepts, and the development of stratigraphic nomenclature. Emphasis on the integration of physical, biological, and chemical parameters in interpretation of the rock record. *Prerequisite:* GEOL 3452 or permission of instructor.
- 5384. Hydrogeology. An introduction to the chemical and physical behavior of natural waters and the role of fluids in geologic processes. The course will stress the application of thermodynamics, kinetics, and fluid mechanics to understand such geologic processes as ore formation, sediment diagenesis, isograd formation, acid rain, global warming, and groundwater contamination. *Prerequisites:* MATH 1338 and CHEM 1304, or permission of instructor.
- 5386. Geochemistry. A survey of geochemical processes within the earth and at its surface, emphasizing mineral water interactions and application of the principles of chemical equilibrium to solution of geochemical problems. *Prerequisite:* GEOL 3452 or permission of instructor.
- 5389. THEORY OF DIGITAL DATA PROCESSING IN GEOPHYSICS. Linear transform theory, convolution, correlation, linear systems, Shannon sampling theorem, discrete Fourier transform, Fast Fourier Transform, Z transform, inverse filtering, recursive filtering, optimum filtering, deconvolution

hours in each of the following three areas: (1) United States, (2) Europe, and (3) Africa, Asia, or Latin America. Any combination of courses in these areas is acceptable (History 4300 will not fulfill these area requirements). At least 18 term hours in courses at the 3000 and higher levels are required. History majors must earn 2.00 minimum G.P.A.s in their history coursework.

Twelve term hours of foreign language are recommended.

The Departmental Distinction Program. A history major with sufficiently high standing may graduate with honors in history by applying for the degree "with departmental distinction." During their senior year, candidates for distinction will pursue an individual research project under the direction of a particular professor (while enrolled in HIST 4375). This major research project will develop from the 5000-level seminar or HIST 4300, the junior seminar. The project will be presented as a thesis before the end of the term. The successful honors graduate must also pass an oral examination on the thesis.

REQUIREMENTS FOR THE MINOR. Students with a general interest in history may pursue a minor by taking 15 term hours of departmental course work. Nine term hours must be taken at the 3000-5000 level. Students intending to take a minor in the department should design a program of study in consultation with the Director of Undergraduate Studies.

PRE-LAW ADVISER. A department adviser is available to advise students interested in legal careers on appropriate course work and the law school application process.

FOUNDATION AND SPECIAL COURSES (HIST)

- 1301,1302. WORLD CULTURES AND CIVILIZATION. A survey of world cultures from the earliest times to the present. The development of individual civilization will be studied within a comparative framework emphasizing the themes common to all human history.
- 1311. WESTERN CIVILIZATION TO 1527 A.D. A survey of the cultural phenomenon often called *Western Civilization*, from its prehistoric roots in western Asia as well as Europe, through ancient Mesopotamian and Egyptian civilization to the Greeks, the Romans, and the medieval experience up to the "Renaissance." Lecture course, with much reference to literature and visual arts.
- 1312. Western Civilization Since 1527. An introductory survey of Western civilization from about the time of the Reformation to the present.
- 2300. THE VISION OF HISTORY: THE WESTERN TRADITION.
- 2301. THE VISION OF HISTORY: THE AMERICAN EXPERIENCE.
- 4300. JUNIOR SEMINAR IN RESEARCH AND WRITING. The Junior Seminar will consist of a common body of readings on research methods and writing and a relatively small core of required readings that will be different in each section and organized around a topic chosen by the instructor. Closely supervised writing assignments, based upon the required readings, will grow into a major research project by the end of the term.
- 4375, 4376. DEPARTMENTAL DISTINCTION. Honors program open to qualified seniors by invitation of the department.
- 4397, 4398, 4399. INDEPENDENT STUDY. History majors in their junior year may apply to the Director of Undergraduate Studies to pursue a personally designed course of study under the guidance of an appropriate professor during the junior or senior year.

UNITED STATES HISTORY

Majors planning a concentration in the U.S. history field are advised to begin their program with one of the "Problems" or *advanced* survey courses (at the 3000-4000 level), *not* HIST 2311, 2312.

THE COURSES (HIST)

- 2311. Out of Many: U.S. History to 1877. Growth of American civilization. General survey, with particular attention to social and political aspects. Open to first-year students.
- 2312. Unfinished Nation: U.S. History Since 1877. Growth of American civilization. General survey, with particular attention to social and political aspects. Open to first-year students.
- 2380 (CF 2380). ETHNIC REGIONS IN THE "WESTERN WORLD." An interdisciplinary course that examines the ways regional ethnic minorities such as the Basques, Québecois, and Chicanos have functioned within larger societies in Western Europe and North America.
- 2398. American Politics and Culture, FDR to Clinton. Examines life and culture in modern America.
- 3301 (CF 3317). Human Rights: America's Dilemma. Examines certain violations of human rights within their historical context and explores America's commission and prevention of human rights violations.
- 3304. Blacks and the Civil Rights Movement2312. U

3384. Social Action in Urban America. An examination of the historical devel-opment of social action in American cities and communities, from religious charity organizations of the 19th century to present-day community organizing projects. The course is taught in conjunction with the SMU Inter-Community Experience (ICE) Program and includes a three-hour-per-week community service requirement. *Prerequisite:* Permission of instructor.

3388. The African-American Urban Experience, 1865-1980. A history of blacks in American cities during the post-Civil War era. Investigates the forces that inspired blacks to relocate to urban areas and surveys the dynamic lifestyles created within evolving black urban communities, the long periods of major African-American rural-to-city migration, institution building, black politics, African-American economics, race relations, and social life.

3391 (CF 3330). From Pew to Bleacher: American Culture and Institutions. An introduc-

- 2354. Ancient Foundations of Modern Civilization. An introduction to the study of the ancient world embracing both the ancient Near East and classical Greek and Roman civilization.
- 2355. HISTORY OF THE ANCIENT NEAR EAST AND EGYPT. An introduction to the ancient civilizations of Mesopotamia, Israel, Anatolia, and Egypt. Examines changing ancient cultures as they contact (or conquer) each other as seen through their literature, histories, and archaeological remains.
- 2365. Europe in the Modern World, Renaissance to 1760. An introductory survey of the growth of European civilization.
- 2366. Europe in the Modern World, 1760 to Present. A continuation of History 2365.
- 3302. GEORGIAN AND VICTORIAN ENGLAND, 1714-1867. The political, social, and economic institutions of Britain and their development in the 18th and 19th centuries.
- 3303. Modern England, 1867 to the Present. Britain in the 20th century, with social and cutural emphasis; traces the changes in outlook and Empire to the present day.
- 3328. Economic History of Europe: 1000 A.D. to the Present. Survey of the development of the European economy from 1000 A.D. to the present. Sources of growth and institutional changes will be explored.
- 3329 (CF 3322). Women in Early Modern European society and intellectual movements from the Renaissance through the Enlightenment.
- 3330. Women in Modern European History. An exploration of the role of women in European society, from the cultures of Crete and Sumer to the present.
- 3332. Ancient and Medieval France. An exploration of selected themes that dominate the current history, archaeology, and historiography of ancient and medieval France, from the paleolithic cave painters to Joan of Arc.
- 3333. EARLY MODERN FRANCE TO 1789. An examination of the social, political, and cultural transformation of 16th-, 17th-, and 18th-century France through the rise of the Bourbon monarchy, its consolidation under Louis XIV, and its evolution under his successors.
- 3334. France Since 1789. A history of France from 1789 to the present with special emphasis on social and cultural history including the French Revolution and its legacy, the development of 19th-century French society, and France during the two World Wars.
- 3335 (CF 3335, FL 3335). ONE KING, ONE LAW: FRANCE 1500-1789. The culture of France through its history and literature, emphasizing the historical developments, ideas, and literary texts that define the period and illuminate both French Classicism and absolutism.
- 3340. THE REVOLUTIONARY EXPERIENCE IN RUSSIA, 1900-1930. The effects of the breakdown of the old regime and the establishment of Soviet power on Russian society and culture. Examines the evolution of political and social institutions, ideologies, literature and the arts against the backdrop of the era's turbulent political history.
- 3341. SOVIET/POST-SOVIET SOCIETY AND POLITICS 1917 TO PRESENT. SOVIET/RUSSIAN/EURASIAN

TOMIC ENERGY AND THE MODERN WORLD. An examination of the development of atomic energy and how it has affected the way we have lived in the 20th century.

- 3344 (CF 3394). THE OXFORD LANDSCAPE: FROM THE STONE AGE TO THE TUDORS. An exploration of several approaches to the development of the distinctive human "landscape" of the Upper Thames Valley and the city that gradually became its metropolis, from the paleolithic era to the end of the Middle Ages. (SMU-in-Oxford)
- 3345. England in Medieval and Early Modern Times. Treats selected themes in the history of England to 1688, with special attention to formative periods and developments in the evolution of the English state. (SMU-in-Oxford)
- 3350. Life in the Medieval World, A.D. 306 to 1095. A survey of the political, religious, and cultural history of Western Europe from Constantine the Great to the First Crusade.

- 3351. LIFE IN THE MEDIEVAL WORLD, 1095 TO 1350. A survey of the political, social, and intellectual structures that characterized the civilization of Western Europe between the First Crusade and the Black Death.
- 3352. THE AGE OF THE CRUSADES. Exploration of patterns of thought and behavior underlying and motivating the military, ideological, and general cultural confrontation between Christendom and Islam from the late 11th to the 14th centuries.
- 3353. THE HISTORY OF ANCIENT GREECE. A study of the ways in which the various societies of ancient Greece approached the problem of defining, establishing, and maintaining an equitable social order.
- 3354. WARFARE AND DIPLOMACY IN ANTIQUITY. A study of the methods both of waging and of averting war in antiquity.
- 3355 (CF 3325). CLASS AND GENDER IN ANCIENT SOCIETY. An examination of class and gender in the ancient world with special emphases on changing definitions of masculinity and femininity in Greek and Roman culture and the position, rights, and interaction of different groups (e.g., free and slave, citizen and foreigner, soldier and civilian).
- 3356. The Individual and Society in Antiquity. A study of different concepts of the nature of the individual and his relation to society in Homeric and classical Greece and republican and imperial Rome.
- 3357 (CF 3363, ENGL 3357). JOAN OF ARC: HISTORY, LITERATURE, AND FILM. The life and later reception of the extraordinary peasant girl, Joan of Arc (ca. 1412-1431), who in two years changed the course of European history before she was burned at the stake.
- 3358. Europe in the Age of the Renaissance, 1300-1520. The political, economic, religious, and cultural history of Europe, with emphasis on the work of the Humanists in Italy and Northern Europe.
- 3359. EUROPE IN THE AGE OF THE REFORMATION, 1520-1598. The political, economic, religious, and cultural history of Europe, including the impact of the Protestant and Catholic reform movements
- 3360. ENGLISH SOCIETY IN THE AGE OF ELIZABETH THE GREAT. This course will focus selectively upon key aspects of the social, cultural, religious, and intellectual life of Elizabethan England, set against the background of political, economic, and diplomatic developments in Europe in the 16th century.
- 3361. ROMAN HISTORY AND THE ROMAN MIND. The development of Roman civilization from its earliest beginnings to the dawn of the Middle Ages.
- 3363 (CF 3306). The Holocaust. Examines the destruction of the European Jews as it emerged from pre-World War I anti-Semitism and Nazi racism. Considers Jewish responses to genocide, the behavior of bystanders, and possibilities of rescue.
- 3365, 3366. Problems in European History. Historical events or trends of particular significance in the development of modern Europe will be examined with consideration of the ways in which historians have assessed and reassessed their viewpoints. Students will be invited to join in the controversy with a modest research project of their own. Topics will be selected in accordance with the interests of students and instructors and hence will vary from term to term.
- 3367. Revolutions in European History. Traces the impact of revolutionary explosions on European civilization from the peasant revolts of the late Middle Ages through the rebellions of the 1560s and 1640s and the great upheavals of the Age of Democratic Revolution to the events of 1917 in Russia. *Recommended preparation:* HIST 2365, 2366.
- 3368 (CF 3312). WARFARE IN THE MODERN WORLD. The evolution of weapons, tactics, strategy, and military organization in the western world from the Renaissance to the present, with special attention to the fundamental nature and causes of armed conflict as well as the interrelationships between warfare and society as a whole.
- 3373 (CF 3327). SCIENCE, RELIGION, AND MAGIC IN EARLY MODERN ENGLAND. A study of the interaction of three ways of thinking about nature and the place of human beings within nature —

- science, magic, and religion. Focuses on early modern England and religious divisions of the English Reformation and civil wars that brought political dissension and many competing views of nature and society.
- 3374 (CF 3328). DIPLOMACY IN EUROPE: NAPOLEON TO THE EUROPEAN UNION. Treats the evolution of the European state system from the post-Napoleonic settlement through the end of the Cold War and creation of the European Union.
- 3375. SOCIAL HISTORY OF EARLY MODERN EUROPE. Studies European social and cultural development from the Renaissance to the French Revolution.
- 3376 (CF 3314). Social and Intellectual History of Europe. Studies European social, cultural, and intellectual development from 1848 to the present.
- 3383. Habsburg Monarchy: Making of East Central Europe. The Habsburg monarchy from its medieval origins through its disintegration at the end of World War I, with emphasis on its enduring legacy to contemporary Europe.
- 3385. THE BALKAN PENINSULA IN ITS EUROPEAN CONTEXT. The impact of events in the Balkan peninsula on the development of European civilization from the conquests of the Ottoman Turks prior to 1566 through the contemporary era.
- 3397 (CF 3336). Modernity and Crises of Identity. Drawing on the works of major intellectuals and artists, this course explores crises of identity in Western culture during the decades prior to World War I.
- 4363. INSIDE NAZI GERMANY. The reality beneath the spectacle of the Nuremberg rallies and the efficiency of the totalitarian state.
- 4369. HISTORY OF MODERN GERMANY. Surveys developments in German society from unification under Bismarck to division in the wake of World War II, with particular attention given to Hitler's rise to power.
- 4380. HISTORY OF SPAIN TO 1492. (Also listed under Latin American History.) The main social, political, and cultural topics of the history of the Iberian Peninsula before Ferdinand and Isabella, focusing on the Roman and Medieval periods.
- $4381.\,H{\rm ISTORY}$ of Spain, 1469 to the Present. (Also listed under Latin American History.) The 5

- 5373. EUROPE FROM BISMARCK TO WORLD WAR I, 1870-1918. Studies some of the modern world's most potent ideas: imperialism, social Darwinism, Marxism, racism, and positivism in the context of Europe at the peak of its influence.
- 5374. RECENT EUROPEAN HISTORY, 1918 TO THE PRESENT. Considers two attempts to revive Europe from the effects of disastrous world wars, as well as the sources of new vigor it has found in the last 30 years.
- 5375. EUROPE IN THE AGE OF LOUIS XIV. The Scientific Revolution, the culture of the Baroque, and development of the European state system under the impact of the Thirty Years' War and the wars of Louis XIV.
- 5376. EUROPE IN THE AGE OF ENLIGHTENMENT, 1715-1789. A study of society and culture in 18th-century Europe, the Enlightenment philosophies, Rococo art, the classical age of music, Enlightened Despotism, and the coming of the French Revolution.
- 5378 Medieval Renaissances. A reading-and-discussion seminar in two bursts of medieval cultural activity, the Carolingian and 12th-Century Renaissances. Focus on two case studies (Alcuin and John of Salisbury).
- 5390. SEMINAR IN RUSSIAN HISTORY. This advanced seminar covers in depth selected topics in late Imperial and Soviet history. *Prerequisite:* HIST 3340 or 3341, or permission of instructor.
- 5391. ATHENIAN DEMOCRACY. This seminar will examine the development of democratic government in Athens and study the functioning of that government in peace and in war.
- 5392. SEMINAR IN EUROPEAN HISTORY. Intensive examination of major topics in European history. *Prerequisite:* Junior standing or permission of instructor.

LATIN AMERICAN HISTORY

Students planning a concentration in Latin American History are urged to take HIST 2384 and 2385, followed by HIST 4380 and 4381.

2384 (CF 2318). LATIN AMERICA: THE COLONIAL PERIOD

Isabella, focusing on the Roman and Medieval periods. (For History majors, fulfills only European requirement.)

4381. HISTORY OF SPAIN, 1469 TO THE PRESENT. (Also listed under European History.) The main social, political, and cultural topics of the history of the Iberian Peninsula from Columbus to the present. (For History majors, fulfills only European requirement.)

FOR UNDERGRADUATE AND GRADUATE STUDENTS
5330, 5331. Seminar in Mexican American History. (Also listed under United States History.)
5382. Seminar in Latin American History

- 3393. China in Revolution. Examines the "century of revolution" in China, from the mid-19th century to the present, beginning with the unique political and social structure of "Old China," and analyzing the impact of Western Imperialism and the creative responses of intellectuals, warlords, and revolutionaries.
- 3395. Problems in Asian History. Historical issues, trends or special topics in Asian history will be explored using a thematic or comparative format.
- 3396. Modern Japan. The transformation of an isolationist, agricultural nation into one of the great economic and military powers of the 20th century.
- 3398. Women in Chinese History. Examines changes and continuities from Neolithic times to today in women's roles in politics and the state, religions and ideologies, the family and its alternatives, and production and consumption.
- 4334. SLAVERY AND REVOLUTION IN ISLAMIC AFRICA. The spread of Islam to Africa, its interaction with classical African religions, the Islamic revolutions of the early modern period, the spread of Sufi mystic orders, and the Muslim slave trade.
- 4364. HISTORY OF SOUTH AFRICA: BACKGROUND TO CONFLICT. A survey of the history of South Africa from the 17th century to the present. Emphasis on the historical development of the patterns of economic, social, and political interaction among the peoples that have produced the current crisis.

INDIVIDUALIZED STUDIES IN THE LIBERAL ARTS

Professor Hayes, Director

The Individualized Studies major in the Liberal Arts provides students an opportunity to design an interdisciplinary program of study that brings fields of inquiry together in unique combinations not currently offered as a program in the curriculum.

Interested and academically qualified students are invited to explore this possibility with the Director of the Program, Dr. Kathy Hayes, Associate Dean of Dedman College, 214-768-2168. If the Plan of Study appears to have merit, Dr. Hayes will suggest faculty persons in appropriate departments and divisions of the University

ADMINISTRATIVE PROCEDURES

The Dedman College Undergraduate Council shall have the final authority to approve all individualized programs. The Chair of the Council (or a designee) will act as the Director of Individual Studies.

the transfer of language study credit from another university, or by taking courses on campus.

The minor in International Studies requires 15 hours of study from the Basic Curriculum, nine hours of which must be in courses at the 3000 level or above. A cocurricular requirement for the minor is one year of college-level study of a foreign language or equivalent.

BASIC CURRICULUM

The first 15 hours (constituting a minor in International Studies) must include one course from Introduction to World Cultures; one course from International Politics; one course from International Economics; and two courses from The Global Perspective. Of the 15 hours required in the Basic Curriculum, at least six hours must be in courses at the 3000 level and above. A total of five classes must be taken from the Basic Curriculum.

Introduction to World Cultures

ANTH 2301 Introduction to Cultural A

PLSC 4342 Comparative Revolutions

BA 3300	Japanese Business (SMU-in-Japan)
ECO 4357	Japanese Economy (SMU-in-Japan)
FL 3320	POST-WAR JAPANESE CULTURE AND SOCIETY
(HIST 3337)	
FL 3350	Perspectives on the East Asian Woman
(SOCI 3341)	
HIST 2394	Traditional East Asia (also SMU-in-Japan)
HIST 2395	Modern East Asia
HIST 3387	ASIA AND THE WEST
HIST 3393	CHINA IN REVOLUTION
HIST 3394/5	PROBLEMS IN ASIAN HISTORY
HIST 3395	EARLY ASIA (SMU-in-Australia)
HIST 3395	Traditional South Asia (SMU-in-Australia)
HIST 3396	Modern Japan (also SMU-in-Japan)
PLSC 3346	GOVERNMENT AND POLITICS OF JAPAN AND KOREA
PLSC 3346	GOVERNMENT AND POLITICS OF JAPAN (SMU-in-Japan)
PLSC 3352	CHINESE POLITICS
PLSC 3353	SOCIAL CHANGE AND POLITICAL ORDER IN CONTEMPORARY ASIA
PLSC 3386	Issues of U.SEast Asia Relations

The minor in European Studies requires 15 hours of study in specific courses. The first six hours (two courses) must be chosen from the three categories of the International Studies Basic Curriculum (see above). Each of the two courses must be from a separate category: either World Cultures, International Politics, or International Economics. The next 9 hours (three courses) must be chosen from the European Studies curriculum (below), with at least one course from each of the two groups: Group I (Social Sciences) or Group II (Humanities and Arts). At least nine hours must be at the 3000 level or above. *If a student is an International Studies major, only one course from the Area Studies curriculum may be double-counted.* A cocurricular requirement for the minor in European Studies is two years of collegelevel study of a European language, other than English. This requirement may be met through examination, the transfer of language study credit from another university, or by taking courses on campus.

Group I: Social Sciences

ANTH 3355	Peoples of Europe
ANTH 3355	NATIONALISM IN EUROPE (SMU-in-Copenhagen)
(PLSC 4343)	
BA 3300	EUROPEAN BUSINESS ENVIRONMENT: THE EU (SMU-in-Copenhagen)
BA 4315	EU Seminar (SMU-in-Copenhagen)
HIST 2365	EUROPE IN THE MODERN WORLD
HIST 3303	Modern England, 1867 to the Present
HIST 3328	ECONOMIC HISTORY OF EUROPE
HIST 3330	Women in Modern European History
HIST 3334	France Since 1789
HIST 3340	THE REVOLUTIONARY EXPERIENCE IN RUSSIA
HIST 3341	Soviet

PLSC 3359	From Communism to Democracy
PLSC 4340	Anglo-American Democracy (SMU-in-Oxford)
PLSC 4358	SOVIET POLITICS: REVOLUTION TO REVOLUTION
PLSC 4384	SOVIET AND RUSSIAN FOREIGN POLICY
PLSC 5341	WESTERN EUROPEAN POLITICS: THE EU
PLSC 5383	EUROPEAN CONFLICT AND SECURITY ISSUES (SMU-in-Copenhagen)
SOCI 5363	CRIMINAL JUSTICE IN SCANDINAVIA (SMU-in-Copenhagen)
Group II: Huma	nities and Arts
ARHS 2351	NINETEENTH-CENTURY ART
ARHS 2352	TWENTIETH-CENTURY ART
ARHS 2352	From Impressionism to Abstract: European Art, 1870-1920
	(SMU-in-Copenhagen)
ARHS 3332	MASTERS OF EUROPEAN ART (SMU-in-Copenhagen)
ARHS 3333	ART AND ARCHITECTURE IN ITALY (SMU-in-Italy)
ARHS 3335	Paris Art and Architecture I (SMU-in-Paris)
ARHS 3337	Paris Art and Architecture II (SMU-in-Paris)
ARHS 3342	SPANISH ART II: EL GRECO TO GOYA
ARHS 3355	ORIGINS OF IMPRESSIONISM (SMU-in-Paris)
ARHS 3357	IMPRESSIONISM IN CONTEXT (SMU-in-Paris)
ARHS 3357	ART IN THE AGE OF REVOLUTION
ARHS 3383	French Painting From Pucelle to Puvis
ARHS 4344	IMAGES OF POWER: KINGS, NOBLES, AND ELITES (SMU-in-Paris)
(HIST 3349)	
CCCN 2352	HISTORY OF EUROPEAN FILM (SMU-in-Copenhagen)
CCCN 3310	THEMES IN EUROPEAN FILM (SMU-in-Copenhagen)
CCCN 3310	Screen Artists (SMU-in-Italy)
CCCN 4305	MOTION PICTURES OF PARIS (SMU-in-Paris)
ENGL 3306	Major British Authors II
ENGL 3312	The English Novel II
ENGL 3341	Women in the Age of Victoria
ENGL 3345	British Literature From 1900 to 1939
ENGL 3346	British Literature Since World War I
ENGL 3347	World War I: The British Experience
(CF 3304)	
ENGL 3360	Writers in Paris: The Invention of Modernism (SMU-in-Paris)
FL 2343	AFTER COMMUNISM
FL 3301	Spanish Civilization (SMU-in-Spain)
(CF 2330)	
FL 3323	RUSSIATC (N)Tj 5.6 0FL 330IERNISMO R L

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LATIN AMERICAN STUDIES

Assistant Professor Manzetti, Director

Latin American Studies provides students with an opportunity to design an interdisciplinary program of study that will give them an in-depth knowledge of Ibero-American history, culture, politics, and society. The program embraces all of the countries of Latin America and the Iberian Peninsula. It is designed to take account not only of specific national cultures and traditions, as they have developed in Latin America, but also the importance of Latin cultures and Hispanic traditions in the United States. To maximize the educational experience, students are strongly encouraged to spend at least one semester or summer studying in Latin America, Spain, or Portugal. Most of the courses taught in University study-abroad programs in Spain and Latin America may be applied to the Latin American Studies minor.

The major in Latin American Studies requires 27 hours of study in specific courses. The first 6 hours (two courses) must be chosen from the three categories of the International Studies Basic Curriculum (see above). The two courses must be from a separate category: either World Cultures, International Politics, or International Economics. The next 18 hours (six courses) must be chosen from the Latin American Studies curriculum (below), with at least two courses from each of the two groups: Group I (Social Sciences) or Group II (Humanities and Arts). At least 15 hours (five courses) must be in courses at the 3000 level or above. If a student is also majoring in International Studies, only two courses from the Area Studies curriculum may be double-counted. A co-curricular requirement for the major in Latin American Studies is three years of college-level study of either Spanish or Portuguese. This requirement may be met through examination, the transfer of language study credit from another university, or by taking courses on campus. The final three-hour requirement for the B.A. in Latin American Studies is the Senior Seminar. The seminar, which must be taken on campus by all students, is designed as a capstone course where the students can integrate and apply what they have learned. The topic of the seminar will vary, depending upon the instructor.

The minor in Latin American Studies requires 15 hours of study in specific courses. The first 6 hours (two courses) must be chosen from the three categories of the International Studies Basic Curriculum (see above). Each of the two courses must be from a separate category: either World Cultures, International Politics, or International Economics. The next nine hours (three courses) must be chosen from the Latin American Studies curriculum (below), with at least one course from each of the two groups: Group I (Social Sciences) or Group II (Humanities and Arts). At least nine hours must be at the 3000 level or above. If a student is an International Studies major, only one course from the Area Studies curriculum may be double-counted. A co-curricular requirement for the minor in Latin American Studies is two years of college-level study of Spanish or Portuguese.

Group I: Social Sciences

ANTH 3311	Peoples of Mexico – Past and Present
ANTH 3313	SOUTH AMERICAN INDIANS OF THE PAST AND PRESENT
ANTH 3354	PEOPLES OF LATIN AMERICA
ANTH 5347	SEMINAR IN MESOAMERICAN ETHNOLOGY
HIST 2384	LATIN AMERICA: THE COLONIAL PERIOD
HIST 2385	LATIN AMERICA IN THE MODERN ERA
HIST 3317	Women in Latin American Societies
HIST 3324	THE MEXICAN AMERICANS, 1848 TO THE PRESENT
HIST 3380	HISTORY OF LATIN AMERICA (SMU-in-Spain)
HIST 3382	HISTORY OF MEXICO

HIST 5355 P

SPAN 5336	THE SPANISH AMERICAN NOVEL (also SMU-in-Xalapa)*
SPAN 5338	THE SPANISH AMERICAN SHORT STORY (also SMU-in-Xalapa)*
SPAN 5339	SPANISH AMERICAN POETRY*

^{*} Restricted to the Latin American Studies major and minor.

AFRICAN AND MIDDLE EASTERN STUDIES

Professor Cordell, Coordinator

This course of study is offered as an area specialization for International Studies majors only.

Group I: Social Sciences

ANTH 3314	Peoples of Africa
HIST 2355	HISTORY OF THE ANCIENT NEAR EAST AND EGYPT
HIST 2391	Africa to the 19th Century
HIST 2392	Modern Africa
HIST 3326	THE VENTURE OF ISLAM
HIST 3378/9	PROBLEMS IN AFRICAN HISTORY
HIST 3382	ORIENT AND OCCIDENT (SMU Summer-in-Paris)
HIST 3386	HISTORY OF THE CARIBBEAN
HIST 3389	Problems in Middle Eastern History
HIST 3390	THE MODERN MIDDLE EAST
HIST 4334	SLAVERY AND REVOLUTION IN ISLAMIC AFRICA
HIST 4364	HISTORY OF SOUTH AFRICA: BACKGROUND TO CONFLICT
PLSC 3345	GOVERNMENT AND POLITICS OF THE MIDDLE EAST
PLSC 3347	GOVERNMENT AND POLITICS OF AFRICA

Group II: Humanities and Arts

ARHS 3306 DEATH AND IMMORTALITY

Term Hours

Fundamental Mathematics: MATH 1337, 1338, 2339, 2343

Natural Science:

For ALL UNDERGRADUATES: After a student matriculates to SMU, transfer credit for neither MATH 1309 nor MATH 1337 will be approved.

THE COURSES (MATH)

- 1303. Precalculus for Business. Inequalities, absolute value, graphs, functions, basic analytic geometry, polynomials, logarithms, exponentials, linear equations, and mathematics of finance. *Prerequisite:* High school algebra. No credit given if taken after any calculus course. Credit not given for both 1303 and 1304. Intended for students planning to take MATH 1309.
- 1304. Precalculus Mathematics. Graphs, functions, basic analytic geometry, exponentials, logarithms, trigonometry, inverse functions. *Prerequisites*: High school algebra and trigonometry. No credit given if taken after any calculus course. Credit not given for both MATH 1303 and 1304. Intended for students planning to take MATH 1337.
- 1307. Introduction to Mathematical Sciences. Permutations and combinations, probability, Markov chains, linear programming, elementary statistics, and mathematics of finance. *Prerequisite:* High school algebra.
- 1309. Introduction to Calculus for Business and Social Science. Derivatives and integrals of algebraic, logarithmic, and exponential functions with applications to the time value of money, curve sketching, maximum-minimum problems, and computation of areas. Applications to business and economics. (Natural science and engineering students must take MATH 1337. Credit not allowed for both MATH 1309 and 1337.) *Prerequisite*: Placement out of MATH 1303 or a grade of *C* or higher in MATH 1303.
- 1310. APPLIED CALCULUS FOR BUSINESS AND SOCIAL SCIENCE. Techniques of integration, multivariable calculus, and differential equations. Applications to business economics, life sciences, and social sciences. (Credit not allowed for both MATH 1310 and 1338.) *Prerequisite:* A grade of *C* or higher in MATH 1309 or 1337.
- 1337. Calculus with Analytic Geometry I. Differential and integral calculus for algebraic and some trigonometric functions with applications to curve sketching, velocity, maximum-minimum problems, areas, and volumes. (Credit not allowed for both MATH 1309 and 1337.) Prerequisite: Placement out of MATH 1304 or a grade of C- or higher in MATH 1304.
- 1338. Calculus with Analytic Geometry II. A continuation of MATH 1337 through differential and integral calculus of transcendental functions, techniques of integration, improper integrals, and infinite sequences and series, including Taylor series. (Credit not allowed for both MATH 1310 and 1338.) *Prerequisite:* A grade of *C*—or higher in MATH 1337 (or MATH 1309 and departmental permission).2339. Calculus with Analytic Geometry III. A continuation of MATH 1338 including parametric equations, polar coordinates, partial differentiation, multiple integrals, and vector analysis. *Prerequisite:* A grade of *C*—or higher in MATH 1338.
- 2343. ELEMENTARY DIFFERENTIAL EQUATIONS. First order equations, linear equations, Laplace transforms, power series solutions, and applications. *Prerequisite*: MATH 2339 (may be taken concurrently).
- 3308. Iand numerical integration. Special attention is given to FORTRAN or C programming, algorithm implementations, and library codes. *Prerequisites*: CSE 1316, 1317, or 1341; and a grade of C- or higher in MATH 1338. Students registering for this course must also register for an associated computer laboratory.
 3334. A

N INTRODUCTION TO APPLIED MATHEMATICS. Formulation, solution, and interpretation of mathematical models used in populations dynamics and traffic flow. Equilibrium, stability, and phase-plane analysis of nonlinear ordinary differential equations from ecology. Method of

characteristics for nonlinear partial differential equations of traffic flow yielding density waves and shocks. Prerequisite: A grade of C- or higher in MATH 2343.

3337. Advanced M

number. Vorticity theorems. Ideal and potential flow. The influence of viscosity, and the boundary layer approximation. *Prerequisite:* MATH 3337.

5353. LINEAR ALGEBRA. Norms, inner products, orthogonal projections, Gram-Schmidt, and least squares. Linear transformations. Eigenvalues and eigenvectors, similarity and unitary transformations, Schur and diagonal forms, singular value decomposition, and Jordan form. Discrete and continuous systems, matrix exponentials. Quadratic forms, Rayleigh's principle, and a minimum-maximum principle. *Prerequisites:* MATH 2343 and 3353, or permission of instructor.

5381. INTRODUCTION TO GENERAL TOPOLOGY. Elementary topology of the line and plane, metric spaces, and general topological spaces; continuity of mappings, connectedness, compactness, completeness, and fixed-point theorems. *Prerequisite:* MATH 3353.

MEDIEVAL STUDIES

Associate Professor Wheeler, Director

Ranging from the 4th century A.D. to 1485, from Celtic Britain to Visigothic and Islamic Spain, Byzantium to Persia and the Caliphate, from script to print, from feast to fast, from fine arts to liberal arts, from Augustine to Abélard and beyond; this program offers an intense and condensed liberal education. Studies reveal how the historical shapes, institutional structures, literary visions, and artistic forms that emerged from the Middle Ages have colored our concepts of God, society, self, love, individualism, and success.

The Medieval Studies Program affords the student an opportunity for a "classically" liberal education within a broad subset of "Western" (Celtic, Franconic, Italic, Germanic, Visigothic) and "non-Western" (Byzantine, Islamic, Persian) contexts. It is appropriate for pre-professional training in multiple fields, ranging from business to religious studies and from biology to music theory and foreign languages and literatures. It can also lead to graduate work in medieval studies or in such disciplines as literature, history, and art/music history.

THE DALLAS MEDIEVAL CONSORTIUM makes it possible for students at SMU, the University of Dallas, and the University of Texas-Dallas to enroll in selected medieval studies courses on the other campuses. Through the Consortium, SMU students can elect no more than a total of 15 hours in medieval subject courses at any other Consortium college.

REQUIREMENTS FOR THE B.A. DEGREE. Medieval Studies is an interdisciplinary major of 30 hours in medieval subjects, and Latin language and literature, distributed over at least three broad subject areas in medieval studies: 1) history, 2) literature, and 3) music and visual arts (art/music history), with no less than six hours in each area. Latin language and literature courses after the second year may count toward hours for the Medieval Studies major. Students are encouraged to take courses in philosophy, religious studies, and church history as they are available. Individual student programs are approved by the Director of Medieval Studies and a committee of two other members of the SMU Medieval Studies faculty.

REQUIREMENTS FOR THE MINOR. A student must complete 15 hours from the courses listed, including at least three interdisciplinary and nine advanced hours. No more than six hours at the introductory (1000 or 2000) level may be counted; some of the MDVL and CF (Cultural Formations) courses listed below are also interdisciplinary. Other courses may satisfy the interdisciplinary component. Individual student programs are approved by the Director of Medieval Studies.

As a model, the following is a typical Medieval Studies major sequence for SMU students:

Sophomore year Fall term:

CF 3352 (MDVL 3352) Ideas and Ideals of Gender in the Middle Ages

CF 3353 (MDVL 3353) MEDIEVAL THOUGHT

CF 3363 (ENGL 3357, HIST 3357) Joan of Arc in History, Literature, and Film

CF 3394 (HIST 3344) THE OXFORD LANDSCAPE: FROM THE STONE AGE TO THE TUDORS (SMU-in-Oxford)

ENGL 1325 CHIVALRY

ENGL 3321 Medieval English

LATN 3335 MEDIEVAL LATIN

MDVL 3327 THE UNICORN: UNDERSTANDING VARIETIES OF TRUTH IN THE MIDDLE AGES

MDVL 3398 DIRECTED STUDIES

MDVL 3399 DIRECTED STUDIES

MDVL 4371 SPECIAL TOPICS

MDVL 5301 INDEPENDENT STUDIES

MDVL 5302 INDEPENDENT STUDIES

MDVL 5398 INDEPENDENT STUDIES

MDVL 5399 INDEPENDENT STUDIES

MUHI 3253 Survey of Medieval and Renaissance Music

MUHI 4392 DIRECTED STUDIES IN MUSIC HISTORY: THE MIDDLE AGES

MUHI 5339 Seminar in Medieval Music

MUHI 6309 Seminar in Medieval and Renaissance Sources and Styles

PERE 3075 COLLEGIUM MUSICUM

PERE 3175 COLLEGIUM MUSICUM

PHIL 3355 HISTORY OF WESTERN PHILOSOPHY: MEDIEVAL

PLSC 4361 POLITICAL REGIMES: UNDERSTANDINGS OF ROME

PLSC 4362 MEDIEVAL POLITICAL PHILOSOPHY

RELI 3320 Introduction to Classical Judaism

RELI 3326 Introduction to the New Testament

RELI 3328 Medieval Judaism

RELI 3349 EARLY CHRISTIANITY

SPAN 5310 Spanish Literature Before 1700

NATURAL SCIENCES

Professor Buchanan, Director

A minor in the Natural Sciences offers students a systematic exposure to biology and chemistry. It is particularly suitable for Engineering majors who are interested in medicine, dentistry, or other biomedical careers. This interdisciplinary minor may not be selected by students majoring or minoring in the Biological Sciences, Biochemistry, or Chemistry. Each advanced course must be taken in residence.

REQUIRED COURSES

BIOL 1401, 1402 Introductory Biology

CHEM 1301, 1113, 1304, 1114 GENERAL CHEMISTRY

CHEM 3371, 3117, 3372, 3118 ORGANIC CHEMISTRY

Select two courses from the following: BIOL 3304 GENETICS
BIOL 3306 PHYSIOLOGY

BIOL 3350 CELL BIOLOGY

PHILOSOPHY

Professor Ehring, Department Chair

Professor: Hausman; Associate Professors: Heller, Norcross, Sverdlik; Assistant Professors: Barnes, McCullagh, Sutton; Adjunct Professors: Anderson, Hiltz, Kazez, Lamb, May; Adjunct Associate Professor Emeritus: Petty.

REQUIREMENTS FOR THE B.A. DEGREE. At least 30 term hours in the department, including at least 21 term hours of advanced work (courses 3000 and above). The 30 hours must include PHIL 3351, 3352, 1301, and at least one course from 3310-3319. At least 12 hours of a foreign language are strongly recommended.

THE DEPARTMENTAL DISTINCTION PROGRAM. Departmental distinction is awarded to philosophy majors graduating with at least a 3.50 G.P.A. in philosophy and who successfully complete a writing project under the guidance of a faculty member.

3302 (RELI 3302). PROBLEMS IN THE PHILOSOPHY OF RELIGION. The philosophy of religion, considering such problems as religious experience, human freedom, good and evil, belief in God, and immortality.

3305. Philosophy and Gender. A consideration of whether or not there are differences between the sexes; whether or not western science, philosophy, and ethics have been dominated by "male thinking;" and current issues such as pornography, censorship, rape, reproductive technologies, etc. Writings by feminist philosophers as well as their critics will be examined.

3310. Advanced Topics in Philosophy. (May be repeated for credit.)

3311. 20th Century Philosophical Analysis. An examination of the method of philosophical analysis as practiced by such 20th century philosophers as Moore, Russell, Wittgenstein, Quine, Austin, and others.

3312. Introduction to the Philosophy of Language. A systematic treatment of such topics as the nature of linguistic reference, meaning, synonymity, truth, vagueness, and metaphor. The course will also examine issues relating to the goals and methodology of linguistics, such as the status of semantic descriptions, and the "nature versus nurture" controversy in language-

- 3371 (CF 3342). Social and Political Philosophy. A historical study of philosophical formulation of the individual good (ethics) in its relation to the public good (social philosophy).

 3372. Marx. What did Marx mean by alienation? Are capitalists as well as workers alienated
- under capitalism? Is there alienation under socialism? In what sense are workers exploited? Does their exploitation differ in kind from that of serfs or slaves? Why did Marx think that capitalism was less efficient than socialism? What is a class, according to Marx? What explains historical change? These and other questions about Marx's thought will be the focus of this course. We will seek to present a rational reconstruction of Marx based on his writings, as well as recent interpretations of Marx by "analytical Marxists." Anyone interested in understanding
- 3373. Punishment and Responsibility. By what right does society punish some people? What is the correct amount of punishment? Who ought to be punished? Various philosophical responses to these questions are examined. Other topics include the morality of capital punishment, excuse and justification, the morality of self defense, and the justifiability of punishing "self-regarding" acts such as drug use.

Marx will find this course useful.

- 3374 (CF $3307). \ Philosophy \ of Law. An analysis of the foundations and nature of law.$
- 3375. Topics in Moral Philosophy. A topics offering that seeks to take advantage of the wide variety of issues that can be fruitfully explored in a course on moral philosophy.
- 3376. Medical Ethics. An introduction to the moral dimensions of decision-making in medical contexts.
- 3380. Doing the Right Thing: Contemporary Views of Morality. A study of contemporary ethical theory.
- 3382. TWENTIETH-CENTURY EUROPEAN PHILOSOPHY. An examination of some methods and principles of European philosophies in the 20th century. Philosophical schools studied: phenomenology, existentialism, Neo-Kantianism, life-philosophy, hermeneutics, and Neo-Marxist critical theory.
- 3383. AMERICAN PHILOSOPHY. Historical development and contemporary themes in American philosophy. Varying emphasis may be placed on trends (e.g., pragmatism), historical figures (e.g., Dewey), or influential contemporary figures (e.g., Quine).
- 4381. Philosophy in the Ibero-American World. A survey of Latin-American philosophy as it relates to the social and cultural development of Latin-America. (SMU-in-Madrid only.)
- 4393, 4394. INDEPENDENT STUDY AND RESEARCH. Special topics to be selected by the student in consultation with the department. *Prerequisites*: Senior standing and departmental approval.
- 5310. Phenomenology. An explication of the main features, concepts and methods of phenomenology, and its relation to the history and problems of ph.0071 Tc (o1w 0 5.6 163.56 23 of surop -1

PHYSICS

Professor McCartor, Department Chair

Professors: Stroynowski, Teplitz; Associate Professors: Olness, Vega; Assistant Professors: Coan, Hornbostel; Visiting Assistant Professor: Scalise; Scholar-in-Residence: Rosenbaum; Adjunct Professors: Cotton, Palmer; Emeritus Professors: Chalk, Crawford.

The Physics Department offers a program consisting of course studies in broad areas of classical and modern physics, and research studies in both experimental and theoretical physics.

The research activities of the faculty are focused primarily in high energy, elementary particle physics and related fields. The advanced classes are small, so there is ample opportunity for students to work closely with the Physics faculty, particularly in the advanced laboratories where students become familiar with state-of-the-art equipment. Undergraduate physics majors are strongly encouraged to participate in research activities. A majority of majors go on to pursue advanced degrees upon graduation from SMU.

Bachelor of Science Degree. This degree program is designed for students who plan careers in physics in industry, laboratories, or academia. A candidate for the B.S. degree must complete a minimum of 38 term hours in physics, including PHYS 1105*, 1106*, 1303†, 1304† (or 1407 and 1408), 3305, 3344, 3345, 3374, 4211, 4392, 5382, and 5383. A student's program will normally include the additional laboratory course PHYS 4112, which is strongly recommended. Additional courses may be chosen from a variety of physics electives or in related fields with departmental permission. A candidate for the B.S. degree must also complete 18 term hours of courses in mathematics, including MATH 1337, 1338, 2339, 2343, 3337, and 3353. Students planning to pursue graduate studies are encouraged to complete more than the minimum 38 credit hours in physics and 18 credit hours in mathematics.

Bachelor of Arts Degree. This degree program is appropriate for students who wish to combine a physics curriculum with a broad liberal arts program with the aim of pursuing careers in medicine, teaching, business, and government. A candidate for the B.A. degree must complete a minimum of 30 term hours in physics, including PHYS 1105*, 1106*, 1303†, 1304† (or 1407 and 1408), 3305, 3344, 4211, 4392, and 5382. Additional courses may be chosen from the available physics electives or in related fields with departmental permission. Additionally, a candidate for the B.A. degree must complete 15 term hours of courses in mathematics, including MATH 1337, 1338, 2339, 2343, 3353, and one advanced mathematics course.

MINOR IN PHYSICS. A minor in physics is particularly appropriate for majors in the natural sciences, including pre-med, mathematics, and engineering. The departmental requirement for a minor in physics is 17 term hours in physics, including PHYS 1105*, 1106*, 1303†, 1304†, or 1407 and 1408, and nine hours of advanced course work.

THE DEPARTMENTAL DISTINCTION PROGRAM. A physics major achieving a B.S. degree may graduate "with departmental distinction" by successfully completing a special program of study in addition to the requirements stated above, while maintaining a minimum G.P.A. of 3.50. The special program consists of independent reading, research, and senior thesis under the direction of a member of the departmental faculty. The student must apply to the Department for this designation during his or her junior year. The student will enroll in either PHYS 4375 or 4390 during the project, and a senior thesis is to be written and presented to the faculty.

SIMULTANEOUS DEGREE PROGRAMS. It is also possible to earn simultaneously a B.S. degree in physics from Dedman College and a degree in engineering from the School

of Engineering and Applied Science. The chairman of the Department of Physics should be consulted for detailed information on the simultaneous degree programs.

THE COURSES (PHYS)

- 1105, 1106. GENERAL PHYSICS LABORATORY. One three-hour laboratory period per week. Taken with PHYS 1303, 1304 if eight hours of credit, including laboratory, are needed. *PHYS 1105 prerequisite for PHYS 1106*.
- 1301. THE IDEAS OF MODERN PHYSICS. Presents cosmology, relativity, quantum mechanics, and particle physics in an essentially descriptive, nonmathematical framework accessible to all SMU students.
- 1303. Introductory Mechanics. For science and engineering majors. Vectors kinematics, Newtonian mechanics, gravitation, rotational motion, vibrations, waves, and fluids. *Prerequisite:* MATH 1337 or high school calculus course recommended.
- 1304. Introductory Electricity and Magnetism. For science and engineering majors. Electricity, magnetism, electromagnetic radiation, optics, special relativity. *Prerequisite:* PHYS 1303. MATH 1338 recommended.
- 1311. Elements of Astronomy. A course in planetary and stellar astronomy including laboratory and observations.
- 1313. Fundamentals of Physics. Contemporary concepts of physics including Newtonian mechanics, gravitation, rotational motion, fluids, the gas laws, vibrations and waves, sound. Intended for the non-science major. No prior knowledge of physics is assumed.
- 1314. THE PHYSICAL PERSPECTIVE. Principles and concepts of physics including electricity, magnetism, the nature of light, Einsteins's theory of relativity, quantum theory, atomic physics, and the Big Bang. Intended for the non-science major. No prior knowledge of physics is assumed.
- 1320. Musical Acoustics. Covers both the acoustics (physical sound properties) and the psychoacoustics (psychological, perceptual properties) of music. Topics include sound in general, sound of musical instruments (including voice), sound characteristics of rooms, electronic production (synthesis), and reproduction of sound. No prior knowledge of physics is assumed.
- 1403. GENERAL PHYSICS. Equivalent of PHYS 1303 and 1105.
- 1404. GENERAL PHYSICS. Equivalent of PHYS 1304 and 1106.
- 1407, 1408. GENERAL PHYSICS. Principles and concepts of physics; applications in the life sciences. Mechanics, thermodynamics, sound, optics, electricity, magnetism, modern physics. *Prerequisite*: MATH 1337.
- 3320. Physics of Music. Covers the acoustics (physical sound properties) of music. Topics include sound in general, sound of musical instruments, acoustics, electronic synthesis, Fourier transforms, interference, diffraction, resonance. *Prerequisites:* PHYS 1303 and 1304 or equivalent. PHYS 3344 recommended.
- 3305. Introduction to Modern Physics. For science and engineering majors. Special relativity. Elements of quantum physics. Structure of atoms, molecules, and solids. Nuclear physics. Elementary particles. *Prerequisite:* PHYS 1304.
- 3344. Classical Mechanics. The motion of a particle and of systems of particles, including oscillatory systems, accelerated coordinate systems, central-force motion, rigid-body dynamics, gravitation, and Lagrangian mechanics.

^{*}Students with substantial laboratory experience may petition the Department to waive the requirement of PHYS 1105 and/or 1106.

[†]Students with a strong high school preparation in physics may take a departmental examination to acquire credit for either PHYS 1303 or 1304.

- 3345. Advanced Mechanics. Topics in classical mechanics including the motion of a system of particles, the two-body central-force problem, small oscillations of coupled systems, collision theory, Lagrange's and Hamilton's formulations, the vibrating string, and the special theory of relativity. *Prerequisite:* PHYS 3344.
- 3368. PRINCIPLES OF ASTROPHYSICS AND COSMOLOGY. Cosmic distance scales. Physics of stars. Expansion of the Universe. Cosmic nucleosynthesis. Selected other topics as appropriate. *Prerequisite:* PHYS 3305.
- 3374. THERMODYNAMICS AND STATISTICAL MECHANICS. Basic concepts of thermodynamics and statistical mechanics with emphasis on quantum statistics. The laws of thermodynamics, entropy, Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics. *Prerequisites:* PHYS 3305. MATH 2343 recommended.
- 4112. LABORATORY PHYSICS II. Intermediate level experimental physics. Approximately one experiment per week. One three-hour laboratory period per week.
- 4190, 4290, 4390. Special Projects in Physics. Directed study of special topics. For physics majors only. *Prerequisites:* Junior or senior classification and permission of department.
- 4211. LABORATORY PHYSICS I. Introduction to experimental physics. Approximately one experiment per week. One three-hour laboratory period per week.
- 4321. METHODS OF THEORETICAL PHYSICS. Matrices, determinants, linear algebra, complex variables, inhomogeneous equations, Sturm-Liouville theory, partial differential equations, special functions, Fourier series and integral transforms, integral equations, calculus of variations, applications. Three lecture hours. *Prerequisites:* MATH 2339, 2343.
- 4375. Research. For physics majors. Students will participate in physics research with a member of the Faculty of the Department of Physics. *Prerequisite:* Permission of instructor.
- 4392. Introduction to Electromagnetic Theory. A development of electromagnetic theory from the experimental laws; Maxwell's equations for the electromagnetic field. Electrostatics, magnetostatics, steady currents, boundary-value problems, time-varying electric and magnetic fields.

FOR UNDERGRADUATE AND GRADUATE STUDENTS

- 5337. Introduction to Solid State Physics. Crystal lattices and the reciprocal lattice. The free-electron model of metals. Crystal binding. Lattice vibrations phonons. Thermal properties of solids. Energy bands in solids.
- 5380. Concepts of Experimental Particle Physics. Principles of elementary particle physics and the experiments by which we learn laws obeyed by these particles, with reading of scientific articles. *Prerequisite:* PHYS 3305 or equivalent; PHYS 5382 recommended.
- 5382. Introduction to Quantum Mechanics. A study of the development of quantum theory including blackbody radiation, the Bohr atom, and the photoelectric effect 5..5 Tc -0.0084 Twx2G 0 Tc ()Tj 6.

POLITICAL SCIENCE

Professor Jillson, Department Chair

Professors: Hollifield, Ippolito; Associate Professors: Carter, Hunt, Kobylka, Manzetti, Simon, Wegren; Assistant Professors: Lusztig, Palmer, Wilson; Emeritus Professors: Balch, Gerhardt.

FOR UNDERGRADUATE STUDENTS

The department offers undergraduate courses of three types. Introductory courses (at the 1000 level) survey each of the broad fields of study in the discipline. Advanced courses (at the 3000 and 4000 levels) explore more closely defined topics within each of those fields — 3000-level courses examine relatively broad subjects; 4000-level courses examine more specific topics, but are not inherently more demanding than 3000-level courses. Introductory-level preparation or at least sophomore standing is recommended for students undertaking these advanced courses.

Independent study courses (at the 4000 level) are offered to majors with sophomore or higher standing; prerequisites for these courses are stated in the course descriptions following.

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for admission to the distinction track. Eligible students must have completed two introductory departmental courses and completed 24 hours of departmental credit before applying for candidacy.

Criteria for graduating with Departmental Distinction include the following:

- 1. A minimum 3.00 overall G.P.A. at graduation.
- 2. A minimum 3.50 average in courses taken for the Political Science major.
- 3. Preparation for a departmental distinction thesis under the supervision of a faculty thesis adviser. The faculty adviser's grade for the thesis must be *A* or higher. This work will be accomplished by taking PLSC 4307 and will be in addition to all other requirements for the major.
- 4. Passing "with distinction" an oral examination of at least one hour, conducted by a faculty distinction examination committee, which reviews the candidate thesis and major curriculum.
- 5. A minimum 3.50 average in at least two advanced courses related to the topic of the thesis; one of these may, but need not, be a course taken outside the requirements of the Political Science major.

- 3326. STATE GOVERNMENT AND POLITICS. A comparative study of the structure, procedure, and functional services of state, county, and municipal governments with emphasis upon intergovernmental relations in the federal government and Texas government.
- 3329. Public Administration. Survey of administrative behavior and administrative action in government.
- 3330. Law, POLITICS, AND THE SUPREME COURT. An introduction to the uniquely political and legal role played by the Supreme Court in elaborating the scope of governmental power and defining individual rights and liberties.

3334. Public O

- 4337. CIVIL RIGHTS. Examines changes wrought in the American system of governance by addition of the Fourteenth Amendment, particularly its Equal Protection Clause, and the ways the Supreme Court has interpreted and applied it over time. Topics of attention include racial discrimination, sex discrimination, and equality in the political process.
- 4338. Criminal Process Rights. Examines the application of the principles of "ordered liberty" and the Bill of Rights to criminal process disputes. Its concerns extend through initial police investigation, trial preparation, trial and jury concerns, and the post-trial determination of punishment.
- 4339. Women AND THE LAW. The status of women in the American legal system, including an assessment of women defined as a legal category and the impact of increasing numbers of women lawyers, judges, and criminals.

Comparative Politics

- 1340. Introduction to Comparative Politics. Analyzes and contrasts different patterns of national political development in Western, Marxist-Leninist, and Third World countries. Political dilemmas confronting each type of system will be examined.
- 3340. WESTERN EUROPEAN POLITICS. The political development of Britain, France, Germany, and Italy. Topics include: the emergence of parliament and parties; democratic breakdown and the rise of fascism; modern parties and interest groups; state economic planning; corporatism; extraparliamentary oppositions.
- 3341. POLITICS OF PARTICIPATION AND REPRESENTATION IN WESTERN DEMOCRACIES. This course focuses on the numerous avenues through which citizens influence politics and policy making in advanced industrial democracies. The course will consider the implications of formal institutional structures, such as electoral and party systems, the impact of organized groups, as well as more informal forms of participation, such as protest movements and citizen initiatives.
- 3342. MAKING DEMOCRACY WORK. This course aims to answer the fundamental question of why democracy thrives in some nations while in others it struggles, and in many more it has not yet taken root.
- 3345. GOVERNMENTS AND POLITICS OF THE MIDDLE EAST. A survey of modern Middle East governments and politics; historical, ideological, and economic and social influences on their domestic and foreign policies; analysis of emerging political forms; some emphasis on modernization problems.
- 3346. GOVERNMENTS AND POLITICS OF JAPAN AND KOREA. A study of political institutions, foreign policies and international relations, and the economic and social problems of Japan and Korea.
- 3347. GOVERNMENTS AND POLITICS OF AFRICA. The politics of Black Africa in an international context, emphasizing the problems of race, nationalism, and economic development.
- 3348. GOVERNMENTS AND POLITICS OF LATIN AMERICA. The structure, functions, and operations of government in Latin American countries with emphasis on political practices and institutions.
- 3349. POLITICS OF MAJOR LATIN AMERICAN COUNTRIES. An introduction to the problems of political development in some of the major countries of Latin America: Argentina, Brazil, Chile, and Mexico.
- 3352. Chinese Politics. Chinese contributions to Marxist-Leninist theory; analysis of Chinese institutions and policy making, with emphasis on recent political developments.
- 3355. THE POLITICAL ECONOMY OF THE WELFARE STATE. Focuses on the origins, evolution, and management of industrial democracy in Europe and America. It emphasizes the interconnections between political and economic challenges inherent in policy making, and the economic implications of public policy.
- 3358. GOVERNMENT AND POLITICS OF RUSSIA. Examines attempts to reform the former Soviet Union since 1985. In particular, it analyzes the social and political processes behind the demise of the Soviet system. Emphasis is placed on sources for support of, as well as obstacles to, political, economic, and social reform in post-communist Russia.
- 3359. From Communism to Democracy. The rise and fall of communist regimes and the transition to democracy in Eastern Europe and the former Soviet Union, emphasizing social, economic, and political influences affecting divergent paths to democracy.

- 4340. Special Studies in Comparative Governments and Politics.
- 4341. Comparative Rights and Representation. This course will examine the tension that exists between rights and democratic representation. Issues explored include judicial social-policy making, individual versus collective rights, aboriginal rights, and affirmative action.
- 4342. Why Nations Revolt. This course provides an introduction to revolutions by surveying the major theories that have been developed to explain the occurrence of revolutions. Various revolutions will be examined as case studies, including the French, Russian, Nazi, and Chinese revolutions. In addition, at least one peasant revolution in the Third World will be covered.
- 4348. Seminar: Comparative Government and Politics

of Islamic, Jewish, and Christian authors, students attempt to come to an understanding of the fundamental issues at stake in their works. The course also examines closely the alternative solutions proposed for solving what has been termed the "theological-political problem."

4368. SEMINAR: POLITICAL THEORY AND PHILOSOPHY. An overview of the central questions in the study of political theory and philosophy.

4371. JURISPRUDENCE. An introduction to alternative ways of viewing the sources, functions, and uses of law. Attention is given to various understandings of concepts of justice and rights.

4376. RESEARCH DESIGN AND DATA ANALYSIS IN POLITICAL SCIENCE. Focuses on the "art" and "science" of designing and conducting empirical research in political science. The topics covered include research design, measurement, data analysis, and hypothesis testing. This course will satisfy the requirement for PLSC 3375, Quantitative Methods, for the B.S. degree in Political Science.

INTERNATIONAL RELATIONS

1380. Introduction to International Relations. A basic survey of the elements of international relations, including the nation-state system, international organizations, international law, diplomacy, foreign policy, and various nonstate actors such as multinational corporations.

3382. International Organizations: Global and Regional. A study of the United Nations and other international agencies in their attempts to deal with the great international political problems of our times.

3383. THE AMERICAN FOREIGN POLICY PROCESS. A survey of the contemporary content and the conduct of American foreign policy.

3387. POLITICAL GEOGRAPHY

4391. NAFTA AND FREE TRADE IN THE AMERICAS. Exploration of the domestic politics of the three NAFTA countries leading to the North American Free Trade Agreement, the effects of the agreement, and possibilities for expanding free trade in the Americas.

4398. Nuclear Weapons and World Politics. Focuses on the nuclear rivalry between the U.S. and the USSR, and on how this rivalry has transformed the nature and conduct of world politics. Emphasis is placed on theoretical and analytical perspectives, including deterrence theory, bargaining, and game theory. Attention is also given to the implications stemming from both the vertical and horizontal proliferation of nuclear weapons.

SPECIAL UNDERGRADUATE OFFERINGS

Opportunities for independent study and research are available to majors in politi-

- f. Abnormal Psychology (5355)
- g. Psychology of Learning (5384)
- h. Physiological Psychology (5385)
- i. Memory and Cognition (5388)
- j. History of Psychology (5390)
- 5. Nine additional hours at the 3000 level or above.

Total number of hours: 33

Practicum, individual research, and independent study courses (4161, 4172, 4261, 4272, 4361, 4372, 5100, 5200, and 5300) may be taken only on a pass-fail basis. Such courses will not count toward the major.

The successful completion of PSYC 1300 (Introduction), 3382 (Experimental) and STAT 2331 is required prior to declaring a Psychology major.

REOUIREMENTS FOR THE MINOR IN PSYCHOLOGY

PSYC 1300 (Introduction to Psychology) must be successfully completed before declaring a Psychology minor. The minor requires three PSYC courses chosen from the following: 3332 (Developmental Psychology), 3341 (Social Psychology); 3380 (Health Psychology), 3382 (Experimental Psychology), 3383 (Sensation and Perception), 5354 (Personality), 5355 (Abnormal Psychology), 5384 (Psychology of Learning), 5385 (Physiological Psychology), 5388 (Memory and Cognition), and 5390 (History of Psychology).

The student must also complete two elective courses in Psychology (six hours), excluding Independent Research, Human Relations Seminar, and Practicum.

THE COURSES (PSYC)

- 1300. Introduction to Psychology. Broad introduction to psychology as a behavioral science with special emphasis on cognition, development, learning, social, personality, physiological, and clinical psychology (psychopathology and psychotherapy).
- 3332. Developmental Psychology. A survey of the processes and variables that influence the development of the child, adolescent, and young adult. Emphasis is on research in such areas as perceptual, cognitive, language, and social/emotional development.
- 3337. THE PERSON IN PSYCHOLOGY AND LITERATURE. This course explores issues in personality, from psychoanalysis to contemporary research, through literature. Discussion will center on readings from psychology and literature on topics such as motivation, emotion, and madness.
- 3341. Social Psychology. Effect of social conditions on individual behavior; includes topics such as attitude change, conformity, attraction, aggression, and small-group behavior. *Prerequisite:* PSYC 1300 or permission of instructor.
- 3350. PSYCHOLOGY OF WOMEN. A study of the origin and development of supposed sex differences and their psychological consequences. Emphasis on which sex differences are supported by research and which are not. Also covered are the social and personal conflicts encountered by women today, particularly in the business world.
- 3380. Health Psychology. An overview of psychological factors affecting the body. Topics include emotion, stress, disease of the immune and cardiovascular systems, eating disorders, and aging.
- 3382. EXPERIMENTAL PSYCHOLOGY. Design and evaluation of psychological research with emphasis on scientific method, data collection, experimentation, control procedures, validity, reliability, and report-writing skills.
- 3383. Sensation and Perception. Characteristics of external stimuli, physiology of receptor mechanisms, and information processing. Emphasis on vision and hearing with some coverage of other sensory modalities.
- 4161, 4261, 4361. Individual Research in Psychology. Supervised individual empirical research and/or library research on selected problems. The proposed research must be submitted to and approved by the instructor before admission. Pass/fail only.

- 4172, 4272, 4372. Human Relations Seminar/Practicum. An intensive study of interpersonal helping relationships based upon psychological theories and research findings. The emphasis will be upon supervised personal involvement with others as a helper. Pass/fail only.
- 4398. SEMINAR FOR DISTINCTION CANDIDATES. Each prospective distinction student will write and defend a research proposal for their distinction thesis.
- 4399. DEPARTMENTAL DISTINCTION THESIS. Each distinction student will write and defend a research thesis. Students defending their thesis before an examining committee selected from within SMU's Department of Psychology will receive Distinction in

- 5359. DEATH AND DYING. An intensive study of topics related to mortality including sociocultural attitudes, funeral practices, loss and mourning, suicide, death across the lifespan, legal and ethical issues, and spiritual aspects of death.
- 5361, 5362, 5363. Special Topics in Psychology. This course is designed to cover topics that may have temporary or limited interest.
- 5371. PSYCHOLOGICAL TESTING. Statistics and theories underlying the construction of psychological tests and inventories; emphasis upon concepts of reliability, validity, and other procedures for utilizing and evaluating psychological tests. *Prerequisite:* PSYC 3382.
- 5381. Psychosomatic Processes. Explorations into the links between mind and body. Theories and recent findings concerning psychological influences on emotion, stress, immune system function, and selected diseases are discussed. *Prerequisite:* Permission of instructor.
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- I. Eighteen (18) hours of core courses:
 - a. ECO 1311, 1312, and 3301.
 - b. PLSC 1320, and PLSC 1340 or 1380.
 - c. ECO 2320 (cross-listed as PLSC 2320).
- II. At least 15 hours of advanced courses in Economics and Political Science with no fewer than six hours in any one discipline.

INTERNSHIPS

PP 4306 Internship in Public Policy

- 1304. Introduction to Western Religions. A historical introduction to Judaism, Christianity, and Islam. Topics include Moses and ancient Israelite religion; Jesus and early Christianity; rabbinic Judaism; Muhammad and classical Islam; the birth of Protestantism; and Jewish, Christian, and Islamic modernism.
- 1305. Introduction to Primal Religions. An introduction to the religious world views and ritual life of such primal cultures as Australian aboriginals, African tribal peoples, and native North and South Americans, as well as the significance of the resurgence of neo-paganism in the West.
- 3302. Problems in the Philosophy of Religion (PHIL 3302). The philosophy of religion, considering such problems as religious experience, human freedom, good and evil, belief in God, and immortality.
- 3303. Beyond the Death of God. Exploration of contemporary loss of belief in God as supernatural problem-solver and need-fulfiller, with special attention to the search for non-theistic models of reality and techniques of transcendence.
- 3304. Introduction to Christian Theology. An exploration of such theological problems as the authority of the Bible, the reality of God, the meaning of Christ, the nature of humanity, and the end of history in the light of the biblical heritage and contemporary thought.
- 3305 (CF 3331). Religion as Story. An interpretation of stories as modes of religious discernment as well as means of religious communication, with special attention to selected narrative forms such as myth, fairy tale, novel, and autobiography.
- 3306. Introduction to the Hindu Tradition. An exploration of the major attitudes and institutions that define the Hindu tradition, with attention to ideology, social organization, and ritual in light of both historical development and contemporary practice.
- 3307. Introduction to Buddhism. Communal rituals, practice, ethics, and political involvement of the Buddhist community (*sangha*) as it has taken form in five cultural areas: India, South Asia. Tibet, East Asia, and America.
- 3308. CHRISTIAN ETHICS AND MORAL ISSUES. An examination of the relationship between moral reasoning and Christian belief. An analysis of various Roman Catholic and Protestant theories of religious ethics and of specific questions of personal conduct and social policy.
- 3309 (CF 3361). BIOETHICS FROM A CHRISTIAN PERSPECTIVE. This course will examine bioethics from a Christian ethical perspective with special attention to different methodological approaches to the significant themes and realities involved (e.g., life, health, suffering, death), and to the most important issues faced today.
- 3310 (SOCI 3320). THE SOCIAL-SCIENTIFIC STUDY OF RELIGION. An introduction to scientific

3317 (CF 3357). Human Meaning and Value in Personal Life. An exploration of the two positive marks of a productive life – love and work – and the two threats to an abundant life – suffering and death.

3318 (CF 3316). THE HERO IN THE BIBLE AND THE ANCIENT NEAR EAST. An examination of concepts of the hero in the literatures of ancient Mesopotamia, Canaan, and Israel, with special attention

- 3336. AFRICAN-AMERICAN RELIGIOUS HISTORY. An examination of the major movements, figures, and critical issues in African-American religious history. The focus is on the United States, although West Africa, Caribbean, and South American materials are included. Special attention is given to slave religion, the civil rights movement, and Black criticism of Christianity.
- 3337 (CF 3356). Christianity and American Public Life. The objectives of this course include these: 1) to acquaint students with some recent criticisms of the dangers of individualism permeating American understanding and life; 2) to propose the communitarian dimensions of human existence from the Christian perspective; and 3) to help students enter more critically into the dialogue about the role of religion in pluralistic contemporary American society.
- 3338 (CFA 3338). Christ as Cultural Hero. An exploration of the impact of Jesus on the history of Western culture, not only in religion and philosophy, but in the fine arts, literature, and politics.
- 3340. Religious Experience. An examination of the varieties of religious experience from traditional forms of mystical and ecstatic experience, to nontraditional forms of altered states of consciousness. Attention is given to social, cultural, ethical, psychological, and existential dimensions of religious experience approached from a cross-culturalAS

- 3370. Great Religious Leaders. A comparative study of the life and thought of outstanding representatives of diverse religious traditions, with special attention to founders and revitalizers of the world religions.
- 3372. BIBLICAL INTERPRETATION AND THE STATE OF ISRAEL. An examination of the ways in which the Bible has been interpreted both in support of and in opposition to the modern state of Israel.
- 3374. Female and Male in Religion and Culture. How does the study of gender differences affect our understanding of history, religion, and culture? This course will take a critical look at current discussions in the field of women's studies and their impact on contemporary thought.
- 3375 (CF 3343). Wives, Mothers, Lovers, Queens: Expressions of the Feminine Divine in World Religions and Cultures Fep 5.6 tE16sncesE0o0.02IH1i.6 0.0c4 Tm 0i,LUS 8

SOCIOLOGY

Associate Professor Hawkins, Director of Undergraduate Studies
Associate Professors: Cortese; Adjunct Professor: Patterson; Adjunct Associate Professor:
R. Wilson; Visiting Assistant Professor: Mobasher; Adjunct Instructors: Fawns, McDanel.

SOCI 2310 is prerequisite to all courses numbered 4000 and above, except for upper-division students who have obtained permission of the instructor. Note additional prerequisites for some courses. Courses below 4000 are open to students at each level without other prerequisite.

Students wishing to work for distinction in sociology should consult the Director of Undergraduate Studies as soon as possible in the junior year.

REQUIREMENTS FOR THE B.A. DEGREE. A program of study for students who want

- expression of relationships through the use of models. Lab sessions will investigate sociological data sets through the use of the student version of SPSS for Windows.
- 3330. Person vs. Society? Social-psychological examination of causes and consequences of conformity and loss of individuality; emphasis on strategies for countering pressures to conform and for achieving personal autonomy.
- 3340. Global Society. This course intends to provide students with a sociological orientation to the contemporary world, viewed as an evolving network of nation-states. Focusing on the global interdependence of countries, the position of societies in the world system will be related to their internal patterns of social stratification.
- 3348 (CF 3348, FL 3348). Women in Japanese Culture and Society. Examines various women's issues in Japan through social science, literature, literary works, and contemporary films from interdisciplinary perspectives. Assesses changing women's status and roles in family, education, employment, mass media, and political organizations in the context of the contemporary feminist movement.
- 3350. Social Welfare. Problems of poverty, insecurity, and opportunity; critique of social programs and agencies.
- 3351. Marriage and Family. Husband-wife and parent-child relations in the United States; traditions and alternatives.
- 3360. Law and Society. This course is designed to give students a broad overview of the history and functions of our major legal institutions and their relationship to American culture and social structure.
- 3363. Crime and Delinquency. Extent of the problem; casual theories; prevention and public policy.
- 3368 (ANTH 3368). Urban Problems: A Cross-Cultural Perspective. Evolution, development, and differentiation of Western cities compared to non-Westernized cities. Fulfills co-curricular requirement for Diversity.
- 3370. MINORITY-DOMINANT RELATIONS. The nature, origins, and consequences of relationships between unequal groups; U.S. and other societies compared. Fulfills co-curricular requirement for Diversity.
- 3371. Changing Sex Roles. Roles of men and women in American Society; analysis of the acquisition, content, and consequences of sex roles; social movements and implications for social change. Fulfills co-curricular requirement for Diversity.
- 3372. CHICANOS IN THE SOUTHWEST. Contemporary Chicano life and culture in the Southwest; effects of racism and rapid urbanization.
- 3383 (CF 3385). RACE, CULTURE, AND SOCIAL POLICY IN

- 5321. POPULATION PROBLEMS. Causes and consequences of population growth and change in the United States and the world. SOCI 4311 and STAT 3312 suggested but not required.
- 5331. Human Behavior in Groups. Processes through which groups develop structure, and change; factors affecting morale and efficiency.
- 5335. COLLECTIVE BEHAVIOR. Nature, causes, and consequences of crowds, riots, fads, public opinion, social movements, revolution.
- 5363. THE ADMINISTRATION OF JUSTICE. Law enforcement and criminal court systems; the ideal of justice and public policy.
- 5364. CORRECTIONAL SYSTEMS. The history of punishment, adjustment to incarceration, and comparison of prisons for men and women. Constitutional issues of criminal punishment discussed.
- 5366. Deviant Behavior. Causes and consequences of deviant behavior; evaluation of leading theories.
- 5373. Social Inequality. Unequal distribution of power, prestige, and opportunity within society; causes and consequences.
- 5374. Social Change. Review of major social change theories emphasizing: technology, modernization, social power, impact of change on individuals and institutions; possible solutions to resulting problems. Seminar format.
- 5375. Organizational Change. Changes within bureaucracies and in their relationships with other social structures.
- 5398, 5399. PRACTICUM. Prerequisite: Permission of director of undergraduate studies.

SOUTHWEST STUDIES

Professor Weber, Director

Southwest Studies offers an interdisciplinary approach to the study of the American Southwest. Understanding the region's distinct environments and diverse cultures

CORE REQUIREMENTS (SWST)

The following six hours are required of all students majoring or minoring in Southwest Studies:

2322 (CF 3338). Defining the Southwest: From the Alamo to Hollywood. An interdisciplinary seminar designed to introduce students to the idea of regionalism in American life, to identify the distinctive features that make the Southwest a region, and to suggest the variety of ways in which different disciplines understand the regional distinctiveness of the Southwest.

5355. Seminar in Southwest Studies. A research seminar designed to introduce advanced undergraduates to the challenges and rewards of doing original interdisciplinary work on Southwestern themes. Topics to be determined by the instructor.

PERSPECTIVES ON THE REGION

I. HISTORICAL DIMENSIONS

HIST 3321 THE AMERICAN SOUTHWEST

*HIST 3305 THE HISPANOS OF NEW MEXICO, 1848-PRESENT

HIST 3319 Texas History

HIST 3320 THE SPANISH FRONTIER IN NORTH AMERICA, 1513-1821

HIST 3324 THE MEXICAN AMERICANS, 1848-PRESENT

HIST 3382 HISTORY OF MEXICO

HIST 5331 SEMINAR IN MEXICAN

- CCTR 3301 Topics in TV-Radio: Ethnic Media and Representation: the View from the Southwest
- ENGL 3361 LITERATURE AND SOCIETY (acceptable for the major or minor only when taught with Southwestern focus)
- ENGL 3368 LITERATURE OF THE SOUTHWEST
- *ENGL 3370 (CAPS 3370) Women and the Southwest
- ENGL 3371 CHICANA/CHICANO LITERATURE
- ENGL 3372 HISTORY OF U.S. HISPANIC LITERATURE
- ENGL 3399 DIRECTED STUDIES (acceptable for the major or minor only when taught with Southwestern focus)
- ENGL 4362 OR 4363 WRITERS (acceptable for the major or minor only when focus is on one or more Southwestern writers)
- ENGL 4372 or 4373 Special Topics (acceptable for the major or minor only when taught with Southwestern focus)
- PLSC 3326 STATE GOVERNMENT AND POLITICS (acceptable for the major or minor only when taught with Texas focus)
- SOCI 3300 CONTEMPORARY URBAN PROBLEMS

REQUIREMENTS FOR THE B.S. DEGREE. The curriculum is designed to serve students seeking challenging careers in industry, government, and business as well as those preparing for graduate study in statistical science. The primary focus of the required coursework is an enhancement of an individual's skills in data analysis and the proper interpretation of quantitative information. With a proper choice of electives, the program permits a student to obtain sufficient preparation for graduate school admission.

Prerequisite Courses

MATH: 1337, 1338, 2339

One of the following: CSE 1340, ISOM 2308

Advanced Departmental Courses

STAT: 4340 or 5340, 4370, 5344, 5371, 5372, 5374, 5377, 5385

Electives – 12 hours selected from the following

STAT: 2301 or 2331 (no more than one)

MATH: 2343 and courses numbered above 3000 (except Math Education and History)

CSE: 3360, 5361, 5369 ECON: 5350, 5352

Special Comments – STAT 2301 or STAT 2331 should not be taken after any of the required Statistics courses.

The following courses are recommended for students intending to do graduate study in Statistics: MATH: 3353, 5338

REQUIREMENTS FOR THE MINOR. The Statistical Science major is particularly useful to individuals in the sciences, engineering or applied sciences, social sciences, and business. More generally, those planning careers that involve the processing, description, and/or analysis of bodies of information or data will find a minor in statistics beneficial.

A minor in Statistical Science requires 15 or more hours of statistics selected as indicated from the categories listed below.

- 1) No more than two of the following three courses: STAT 1301, 2301, 2331. PSYC 3382 may be used for this category by non-psychology majors. STAT 1301 may not be taken concurrently with or following any 4000 or 5000 level course listed in 2) or 3) below.
- 2) At least one of STAT 4340, 4370, 5344, 5374, 5377, or 5385.
- 3) STAT 5371 and 5372.

THE COURSES (STAT)

- 1301. Introduction to Statistics. Introduction to collecting observations and measurements, organizing data, variability, and fundamental concepts and principles of decision-making. Emphasis is placed on statistical reasoning and the uses and misuses of statistics.
- 2301. STATISTICS FOR MODERN BUSINESS DECISIONS. A foundation in data analysis and probability models is followed by elementary applications of confidence intervals, hypothesis testing, correlation, and regression. *Prerequisite:* CEE Math Fundamentals or equivalent.
- 2331. Introduction to Statistical Methods. An introduction to statistics for behavioral, biological, and social scientists. Topics include descriptive statistics, probability and inferential statistics including hypothesis testing, analysis of variance, and contingency tables.
- 4340 (CSE 4340). STATISTICAL METHODS FOR ENGINEERS AND APPLIED SCIENTISTS. Basic concepts of probability and statistics useful in the solution of engineering and applied science problems.

FOR UNDERGRADUATE AND GRADUATE STUDENTS

These courses do not carry graduate credit for students in the M.S. program or in the Ph.D. program in statistics.

THE COURSES (WS)

2308 (CF 2308). REVISIONS: WOMAN AS THINKER, ARTIST, AND CITIZEN. This course is designed to discover how an emphasis on the particular experiences of women can enhance and complicate traditionally conceived areas of scholarship and critical endeavor. It also explores areas of women's experience traditionally undervalued, such as friendship, sexuality, motherhood, and old age.

2309 (CF 2309). LESBIAN AND GAY LITERATURE AND FILM: MINORITY DISCOURSE AND SOCIAL POWER. The exploration, through literature and film, of the struggles by gay men and lesbians to create social identities and achieve human rights. Study of key cultures and pivotal historical periods in the West from ancient Greece to contemporary America.

2315 (CF 2315). GENDER, CULTURE, AND SOCIETY. An interdisciplinary study of gender ideology stressing anthropological and literary perspectives, this course analyzes gender difference as a structuring principle in all societies and explores some of its representations in literature, film, and contemporary discourse.

2322 (CF 2302). Women: IMAGES AND PERSPECTIVES. An examination of the constant and changing understanding of women reflected in myths, research, and theories of biology, history, religion, the social sciences, literature, and language.

2380 (CF 2303). Human Sexuality. This course explores the biosocial aspects of human sexuality and sex behaviors. A multidisciplinary and cross-cultural perspective will be used to address a wide range of theoretical and pragmatic sexual issues.

3300. The Two-Career Couple

ENGL 3358 LITERATURE AND THE CONSTRUCTION OF HOMOSEXUALITY

ENGL 3359 (FL 3359) MASCULINITIES: LITERARY IMAGES AND PERSPECTIVES

ENGL 3360 The Writer and Her Work

ENGL 3361 LITERATURE AND SOCIETY: WOMEN'S LIVES IN WOMEN'S NOVELS

ENGL 4361, 4362, 4363 Writers (subject to approval)

ENGL 4371, 4372, 4373 Special Topics (subject to approval)

ENGL 6391, 6392, 6393, 6394 Seminars (subject to approval)

FL 3307 Women in Middle East Literature

FL 3312 Women, Writing, and Identity in 20th-Century Chinese Literature

FL 3348 (CF 3348, SOCI 3348) Women in Japanese Culture and Society

FL 3376 Representations of Women in Modern Literature

FREN 5321 Women Writers of the French Renaissance

FREN 5350 Women in Francophone Literature and Film, 1950-Present

HIST 3310 PROBLEMS IN AMERICAN HISTORY: THE AMERICAN FAMILY

HIST 3312 Women in American History

HIST 3317 WOMEN IN LATIN AMERICAN SOCIETIES

HIST 3329 Women in Early Modern Europe

HIST 3330 Women in Modern European History

HIST 3365 Problems in European History: The Education of Women in England and America

HIST 3379 AFRICAN WOMEN IN HISTORY

HIST 3388 Women hist 3310 h