869 **Community and Conservation**

Fall of even years. Summer of even years. 3 credits. Interdepartmental with Fisheries and Wildlife; Resource Development. RB: Social Science methods, social science theory and environmental coursework.

Use of experiential, participatory, field-based mode of inquiry to develop understanding of social and cultural issues associated with conservation. Understanding of different social positions and perspectives

870 Theories of Social Psychology

Spring. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Theoretical perspectives in social psychology. Cognitive processes, group processes, and the self.

872 Social Psychology of Health Care

Fall. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Social psychological aspects of help-seeking behavior. Provider, patient, and family interactions and role relationships. Medical deviance. Compliance, mental health, and stress. Health beliefs and behavior.

873 Social Organization of Health and Medicine

Spring. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies

Organization, delivery, and financing of health care. Public health systems, professional training and associations, and technology. International comparisons

Analysis of Social Data I 881

Fall. 3(2-2) RB: One course in statistics. R: Open only to graduate students in Sociology, Sociology-Urban Studies, Social Science, and Education with a Sociology cognate.

Applications of statistical techniques to social science data. Multiple regression and SPSS. Interpretation, strengths, and weaknesses of various statistical practices.

Analysis of Social Data II 882

Spring. 3(2-2) RB: (SOC 881) R: Open only to graduate students in Sociology, Social Science, and Education with a Sociology cognate.

Applications of multiple regression, path analysis, and factor analysis to social science data. Interpretation, strengths, and weaknesses of commonly used statistical practices.

885 Methods of Sociological Inquiry

Spring. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies or approval of department.

Methods of social science. Comparison of methods. Philosophy of science and social science. Epistemology.

890 Individual Readings

Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 16 credits in all enrollments for this course. R: Approval of department.

Faculty-supervised readings in Sociology.

Master's Thesis Research 899

Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 16 credits in all enrollments for this course. Master's thesis research.

931 **Topics in Structural Inequality**

Fall of even years. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Current research on socioeconomic class, gender inequality, racial and ethnic inequality, power structures, social conflict, urban dynamics, or social change.

950 **Topics in Rural and Environmental** Studies

Spring of even years. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Adoption of innovations, consolidation of food production enterprises, or community response to farm crises.

954 **Techniques of Population Analysis**

Spring of odd years. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Global sources of demographic data. Characteristics of populations. Life table modeling, fertility, mortality, and migration. Reliability of data and validity of models.

970 **Topics in Wellbeing and Health**

Spring of even years. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Topics such as family work and stress, risk and uncertainty, social epidemiology, and life course.

973 Social Analysis of Work

Fall of even years. 3(3-0) RB: (SOC 871) R: Open only to graduate students in the Sociology major or the Sociology-Urban Studies major.

Occupational structures, work settings, functions and meanings of work. Mobility and career patterns. Applications to health and medicine.

974 Social Attitudes

Fall of odd years. 3(3-0) RB: (SOC 870 or SOC 872) R: Open only to graduate students in Sociology or Sociology-Urban Studies

Attitude and behavior measurement. Structure and function of social attitudes. Persuasion and attitude change.

Social Epidemiology 977

Spring of odd years. 3(3-0) RB: (SOC 851 or SOC 872 or SOC 873) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Social, economic, and ecological factors in health problems within a community or society. Application of social models and methods to epidemiology. Social policies of health promotion and disease prevention.

985 **Qualitative Field Research**

Fall. 3(3-0) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Qualitative research methods. Participant observation, interview, and field documents. Design, data gathering, and analysis.

986 Survey Research Principles

Spring. 3(3-0) RB: (SOC 881) R: Open only to graduate students in Sociology or Sociology-Urban Studies.

Design, analysis, sampling, questionnaire construction, interviewing, and data processing.

989 **Topics in Sociological Methodology**

Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in Sociology or Sociology-Urban Studies. Approval of department.

Evaluation research, experimental or comparative research methods.

999 **Doctoral Dissertation Research**

Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. Doctoral dissertation research.

SPN SPANISH

Department of Spanish and Portuguese **College of Arts and Letters**

Elementary Spanish I 101

Fall, Spring, Summer. 4(4-1) Not open to students with credit in SPN 150.

Practice in using and understanding Spanish to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

102 Elementary Spanish II

Fall, Spring. 4(4-1) P:M: (SPN 101) or designated score on Spanish placement test. Not open to students with credit in SPN 150. Further practice in using and understanding Spanish

to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

Intensive Review of Elementary Spanish 150 Fall, Spring. 5(5-1) P:M: Designated score

on Spanish placement test. RB: Two years of high school Spanish or equivalent. R: Open to students with high school credit in Spanish. Not open to students with credit in SPN 101 or SPN 102.

Intensive review of elementary-level Spanish for students who have had at least two years of Spanish at the secondary-level and who need to strengthen communication skills and knowledge of Spanish language and culture.

175

Spanish for Heritage Speakers I Fall, Summer. 3(3-0) RB: Exposure to Spanish at home or in the community equivalent of less than two years of high school Spanish. R: Approval of department.

Development of listening, speaking, reading, and writing skills in Spanish for students with Spanish language background but little or no formal exposure.

201 Second Year Spanish I

Fall, Spring. 4(4-0) P:M: (SPN 102 or SPN 150) or designated score on Spanish placement test.

Intermediate-level review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Spanish-speaking world

202 Second-Year Spanish II

Fall, Spring. 4(4-0) P:M: (SPN 201) or designated score on Spanish placement test.

Further review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the Spanish-speaking world.

250 Intensive Intermediate Spanish

Fall, Spring. 6(5-2) P.M: (SPN 150 or SPN 102) or designated score on Spanish placement test. RB: Study Abroad experience in a Spanish-speaking country R: Approval of department. Not open to students with credit in SPN 201 or SPN 202.

Intensive accelerated intermediate-level Spanish. Development of aural comprehension, speaking, reading and writing skills. Topics in the cultures of the Spanish-speaking world. Strengthen communication skills and cross-cultural understanding.

275 Spanish for Heritage Speakers II

Spring. 3(3-0) RB: Exposure to Spanish at home or in the community equivalent of two to four years of high school Spanish. R: Approval of department.

Further development of listening, speaking, reading, and writing skills in Spanish for students with Spanish language background and little formal exposure.

290 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department.

Special projects at the intermediate level arranged by an individual student and supervised by a faculty member in areas supplementing, but not replacing, regular course offerings.

310 Basic Spanish Grammar

Fall, Spring. 3(3-0) P:M: (SPN 202 or SPN 250) or designated score on Spanish placement test.

Instruction and practice in the basic structural patterns of Spanish.

320 Cultural Readings and Composition (W) Fall, Spring. 3(3-0) P:M: (SPN 310) and completion of Tier I writing requirement.

Readings from texts that discuss or embody Hispanic culture, and writing based on those readings.

330 Phonetics and Pronunciation

Fall, Spring. 3(3-0) P:M: (SPN 202 or SPN 250) or designated score on Spanish placement test.

Phonetic description of the sound system of Spanish, developed linguistically and applied to the improvement of pronunciation and spoken Spanish.

342 Media and Conversation

Fall, Spring. 3(3-0) SA: SPN 340 C: SPN 330 concurrently.

Discussion in Spanish via journalistic and entertainment media and exposure.

350 Introduction to Reading Hispanic Literature (W)

Fall, Spring. 3(3-0) P:M: (SPN 320) and completion of Tier I writing requirement. Close reading of poetry, drama, and prose.

412 Topics in Hispanic Culture

Fall of even years. 3(3-0) P:M: (SPN 320) SA: SPN 410

Analysis of diverse forms of cultural expression in the Spanish-speaking world.

420 Spain and its Literature

Fall, Spring. 3(3-0) P:M: (SPN 350) Survey of literature written in Spain from the Middle Ages to the present.

432 Latin America and its Literature

Fall, Spring. 3(3-0) P:M: (SPN 350) Survey of literature written in Spanish-speaking Latin America from the Colonial Period to the present.

440 The Structure of Spanish

Fall, Spring. 3(3-0) P:M: (SPN 330) and (LIN 200 and LIN 401 and ROM 401 and ENG 302)

Overview of linguistic approaches to understanding the Spanish language.

452 Topics in Spanish Language I (I)

Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:M: (SPN 320 and SPN 330 and SPN 342) SA: SPN 450

Improvement of language skills through applied practice.

462 Topics in Spanish Literature

Fall. 3(3-0) À student may earn a maximum of 9 credits in all enrollments for this course. P:M: (SPN 420) SA: SPN 460 Thematic topics in Spanish literature.

472 Topics in the Literatures of the Americas

Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:M: (SPN 432) SA: SPN 470 Thematic topics in the literature of the Spanish-

speaking Americas.

482 Topics in Spanish Linguistics

Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for

this course. P:M: (SPN 440) SA: SPN 480 Advanced study of the structure and usage of Spanish.

490 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department.

Special project at the advanced level arranged by an individual student and supervised by a faculty member in an area supplementing, but not replacing, regular course offerings.

491 Special Topics in Spanish

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.

Special topics supplementing regular course offerings, proposed by faculty on a group study basis.

492 Senior Writing Project

Fall, Spring, Summer. 1(1-0) R: Open only to seniors in Spanish.

Research and preparation of a paper on an interdisciplinary subject that synthesizes at least three areas of a major's undergraduate education. Students work under the supervision of a faculty member.

805 Evolution of the Spanish Language

Spring of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Phonology, morphology and syntax of Spanish from its origins to the present.

806 Topics in Hispanic Linguistics

Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Issues in Spanish language in relation to current linguistic inquiry. Topics vary.

807 Literary Theory

Fall of even years. 3(3-0) RB: B.A. in Spanish or equivalent

Contemporary approaches to literary study.

810 Literature of the Reconquest

Fall of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent.

Works, genres, and writers of the Reconquest. Topics vary.

815 Literature of Early Modern Spain

Spring of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent

Poetry, drama, and prose of 16th and 17th century Spain. Topics vary.

830 Spanish Literature of the 20th-Century

Spring of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent

Authors, generations, and tendencies that shape the directions of Spanish literature in the 20th-Century. Topics vary.

835 Colonial Latin American Literature

Spring of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent

Major authors and movements of the Colonial period. Topics vary.

836 19th-Century Latin American Literature

Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Major authors and movements of 19th-Century Latin America. Topics vary.

840 20th-Century Latin American Literature

Spring of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent

Poetry, drama, prose, fiction, and essay of Latin America. Topics vary.

871 Seminar in Hispanic Literature and Society

Fall. 3(3-0) A student may earn a maximum

of 9 credits in all enrollments for this course. Intensive study of Hispanic cultures and literatures. Topics vary.

872 Seminar in Literary Trends in the Hispanic World

Fall of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Intensive study of the cultural approach of Hispanic literary trends. Topics vary.

873 Seminar in Major Hispanic Authors

Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Major Hispanic authors. Topics vary.

Spanish—SPN

874 Seminar in Hispanic Literary Genres Spring of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Hispanic literary genres, including prose, poetry, theater, and essays. Topics vary.

875 Seminar in Popular Culture in the Hispanic World

Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: M.A. in Spanish or Hispanic cultural studies or the equivalent. Popular Hispanic cultures. Topics vary.

identities

876 Seminar in Gender Studies in the **Hispanic World**

Fall of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: M.A. in Spanish or Hispanic cultural studies or the equivalent Gender studies including feminism and masculine

Seminar in Visual Arts/Performance 877 Studies in the Hispanic World

Spring of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: M.A. in Spanish or Hispanic cultural studies or the equivalent

Visual arts and performance studies, including theater, television, cinema. Topics varv.

Seminar in Hispanic Cinema 878

Spring of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: M.A. in Spanish or Hispanic cultural studies or the equivalent.

Hispanic cinema. Topics vary.

879 Seminar in Literature and Culture of the Borderlands

Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Literatures and cultures of the Hispanic borderlands. including Latin America, Catalan, Basque. Topics vary.

880 Seminar in Colonial and Post-Colonial Studies

Spring of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Colonial and post-colonial studies. Topics vary.

890 Independent Study

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

Special Topics in Spanish 891

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 15 credits in all enroll-ments for this course. R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

893 Interdisciplinary Seminar

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with German; English; French. Administered by Department of Linguistics and Germanic, Slavic, Asian and African Languages. R: Approval of department.

Examination of a theme, topic, or genre from several different national and disciplinary perspectives in the appropriate cultural and socio-historical context. Significant texts and important critical analysis selected from Great Britain, Spain, France, Germany, the Americas, and others.

Doctoral Dissertation Research 999

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Approval of department.

Doctoral dissertation research.

STATISTICS AND PROBABILITY

Department of Statistics and Probability **College of Natural Science**

Statistical Methods 200

Fall, Spring, Summer. 3(4-0) P:M: (MTH 103 or MTH 110 or MTH 116 or MTH 124 or MTH 132 or LBS 117 or LBS 118) or designated score on Mathematics placement test. Not open to students with credit in STT 201 or STT 315 or STT 421.

Data analysis, probability models, random variables, estimation, tests of hypotheses, confidence intervals, and simple linear regression.

201 **Statistical Methods**

Fall, Spring, Summer. 4(3-2) P:M: (MTH 103 or MTH 110 or MTH 116 or MTH 124 or MTH 132 or LBS 117 or LBS 118) or designated score on Mathematics placement test. Not open to students with credit in STT 200 or STT 315 or STT 421.

Probability and statistics with computer applications. Data analysis, probability models, random variables, tests of hypotheses, confidence intervals, simple linear regression. Weekly lab using statistical software

Statistics for Scientists 231

Fall, Spring. 3(3-0) P:M: (MTH 124 or MTH 132 or MTH 152H or LBS 118) R: Open only to students in College of Natural Science. SA: STT 331

Calculus based course in probability and statistics. Probability models, random variables. Estimation, confidence intervals, tests of hypotheses, simple linear regression with applications in sciences.

290 **Topics in Statistics and Probability**

Fall, Spring, Summer. 1 to 3 credits. RB: (MTH 103) R: Approval of department. Individualized study of selected topics.

315 Introduction to Probability and Statistics for Business

Fall, Spring, Summer. 3(4-0) P:M: (MTH 124 or MTH 132 or MTH 152H or LBS 118) Not open to students with credit in STT 200 or STT 201 or STT 421.

A first course in probability and statistics primarily for business majors. Data analysis, probability models, random variables, confidence intervals, and tests of hypotheses with business applications.

Quantitative Business Research Methods 317 Fall, Spring, Summer. 3(3-1) Interdepart-mental with Marketing and Supply Chain Management. Administered by Department of Marketing and Supply Chain Manage-ment. P:M: (STT 315) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 317, MTA 317

Application of statistical techniques, including forecasting, to business decision making. Includes applications of linear regression and correlation, analysis of variance, selected non-parametric tests, time series, and index numbers.

Probability and Statistics for Engineering 351 Fall, Spring, Summer. 3(3-0) P:M: (MTH 234 or MTH 254H or LBS 220) R: Open only to juniors or seniors. Not open to students with credit in STT 430.

Probability and statistics for engineering majors. Probability models and random variables. Estimation, confidence intervals, tests of hypotheses, simple linear regression. Applications to engineering.

421 Statistics I

STT

Fall, Spring, Summer. 3(3-0) P:M: (MTH 103 or MTH 110 or MTH 116 or LBS 117) Not open to students with credit in STT 200 or STT 201 or STT 315.

Basic probability, random variables, and common distributions. Estimation and tests for one-, two-, and paired sample problems. Introduction to simple linear regression and correlation, one-way ANOVA.

422 Statistics II

Fall, Spring, Summer. 3(3-0) RB: (STT 421) Not open to students with credit in STT 464. Goodness of fit and other non-parametric methods. Linear models including multiple regression and ANOVA for simple experimental designs.

425 Introduction to Biostatistics I

Fall. 3(3-0) P:M: (MTH 103 or MTH 110 or MTH 116 or LBS 117) or designated score on Mathematics placement test. Not open to students with credit in STT 200 or STT 201 or STT 315 or STT 421.

Basic probability. Density and specificity of diagnostic tests. Discrete and continuous distributions. Estimation. Hypothesis testing from one and two samples. Sample size and power.

426 Introduction to Biostatistics II

Spring. 3(3-0) P:M: (STT 425) Inference from two-samples. Paired samples. Analyses of categorical data. Contingency tables. Linear regression and ANOVA. Design and analysis of epidemiologic studies. Confounding. Mantel-Haenszel tests