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.

SPANISH

SPN

Department of Romance and **Classical Languages** College of Arts and Letters

101. Elementary Spanish I

Fall, Spring. 4(4-1)

R: No previous experience in Spanish or designated score on Spanish placement test. 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 top-

102. Elementary Spanish II

Fall, Spring. 4(4-1)

P: SPN 101 or designated score on Spanish placement test. R: 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.

150. Review of Elementary Spanish

Fall, Spring. 3(3-1)

R: Open to students with high school credit in Spanish and designated score on Spanish placement test. Not open to students with credit in SPN 101 or SPN 102. Review of college first-year Spanish for students who had the language in high school and who need to strengthen communication skills, vocabulary, grammar, and pronunciation before study at the 200 level.

201. Second Year Spanish I

Fall, Spring. 4(4-0)

P: 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.

Second-Year Spanish II 202.

Fall, Spring. 4(4-0)

P: SPN 201.

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

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 arranged by an individual student and a faculty member in areas supplementing regular course offerings.

320. Grammar and Composition (W)

Fall, Spring. 3(3-0)

P: SPN 202. R: Completion of Tier I writing requirement.

Systematic study of Spanish grammar and composition. Extensive writing in Spanish.

Phonetics and Oral Spanish

Fall, Spring. 3(3-0)

P: SPN 320.

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

340. Spanish Culture

Fall, 3(3-0) P: SPN 320.

Aspects of political, social, economic, intellectual, artistic, and literary life of Spain from its origins to the present. Readings, film, and musical selections used as sources for discussion in Spanish.

345 Spanish American Culture

Spring. 3(3-0)

P: SPN 320.

As pects of political, social, economic, intellectual, artistic, and literary life of Spanish America. Readings, films, and musical selections used as sources for class discussion in Spanish.

346. Hispanic Cultures in the United States

Spring of even-numbered years, 3(3-0)

R: Not open to freshmen.

History and culture of the varied Hispanic groups in the United States. Migrant and bilingual education. Border and Caribbean cultures. Literary and artistic expression.

350. Introduction to Reading Hispanic Literature (W)

Fall, Spring. 3(3-0)

P: SPN 320. R: Completion of Tier I writing requirement.

Close reading of poetry, drama, and prose.

355. Hispanic Literatures in English Translation

Spring. 3(3-0)

R: Not open to freshmen.

Selected representative works or themes of the literatures of Spain or Spanish America.

410. Survey of Spanish Literature I

Fall of even-numbered years, 3(3-0) P: SPN 350; SPN 340 or SPN 345.

Major periods, trends, and authors from the origins through the literature of the Golden Age.

Survey of Spanish Literature II

Spring of odd-numbered years. 3(3-0)

P: SPN 350; SPN 340 or SPN 345.

Major periods, trends, and authors from the Spanish Enlightenment to the post-Franco era.

415. Survey of Spanish American Literature

Fall of odd-numbered years. 3(3-0)

P: SPN 350; SPN 340 or SPN 345.

Survey of literature from the conquest through the nineteenth century.

Survey of Spanish American Literature 11

Spring of even-numbered years. 3(3-0)

P: SPN 350; SPN 340 or SPN 345.

Survey of literature of the twentieth century.

425. Linguistic Grammar

department.

Fall. 3(3-0) P: SPN 320; LIN 401 or ROM 401.

Linguistic justification and investigation of major grammar rules of Spanish. Extraction of generalizations from contextualized spoken and written Spanish.

Topics in Hispanic Linguistics

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: SPN 320; LIN 401 or ROM 401. R: Approval of

Topics include phonology, contrastive structures, and syntax.

450. Spanish Literature of the Middle Ages

Fall of even-numbered years, 3(3-0)

P: SPN 410, SPN 411; or SPN 415, SPN 416. Major currents of the Middle Ages as reflected in the writings of representative authors of the period.

455. Cervantes

Spring of odd-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416. Don Quijote, representative novelas ejemplares, drama and poetry.

Spanish Golden Age Literature

Fall of odd-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416.

Theatre, prose, and poetry of the Golden Age, excluding Don Quijote. Renaissance and Baroque ideologies and their genres.

19th Century Spanish Literature

Spring of even-numbered years, 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416.

Principal literary movements of nineteenth-century Spain through representative major works in all genres, and pertinent secondary sources.

470. 20th Century Spanish Literature

works, generations, and authors.

Fall of even-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416. Principal literary movements of Spain through major

Spanish American Literature through

the 19th Century Spring of odd-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416. Development of Spanish American literature from its

480. Spanish American Literature of the 20th Century

origins through the nineteenth Century.

Fall of odd-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416. Major works of poetry, theatre, prose fiction, and essay.

Topics in Hispanic Literatures of the Americas

Spring of even-numbered years. 3(3-0) P: SPN 410, SPN 411; or SPN 415, SPN 416. A national literature or regional literature: Hispanic Caribbean, Mexico and Central America, Andean Countries, River Plate area, or Latino literature in the United States.

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 project arranged by an individual student and faculty member in an area supplementing regular course offerings.

Special Topics in Spanish

Fall, Spring. 3(3-0)

R: Approval of department.

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

Senior Writing Project 492.

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.

800. Current Approaches to Spanish Instruction

Fall. 3(3-0)

Theoretical and applied study of methodologies of teaching Spanish.

805. Evolution of the Spanish Language

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

Issues in Spanish language treated in light of current linguistic inquiry. Topics vary.

807. Topics in Hispanic Culture

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

Topics such as the Enlightenment, Post-Francoist film, and pre-Columbian cultures.

Studies in Medieval Spanish Literature 810.

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

Works, genres, and writers of the Spanish Middle Ages. Topics vary.

815. Studies in Golden Age Literature

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

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

82A Cervantes

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

Critical study of "Don Quijote," "Novelas Ejemplares," or other works.

825. Studies in 18th and 19th Century Spanish Literature

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

Literature from post-Baroque Spain to the Generation of 1898. Topics vary.

830. Studies in 20th-Century Spanish Literature

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

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

835. Spanish-American Literature before Modernismo

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

Major authors and movements from the colonial period to Modernismo. Topics vary.

840. Contemporary Spanish-American Literature

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

Poetry, drama, prose, fiction, and essay from Modernismo to the present. Topics vary.

Independent Study

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 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.

891. 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 for graduate students

999 Doctoral Dissertation Research

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

R: Approval of department.

STATISTICS AND PROBABILITY

STT

Department of Statistics and Probability College of Natural Science

Statistical Methods

Fall, Spring, Summer. 3(4-0)

P: MTH 103 or designated score on mathematics placement test. R: 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: MTH 103 or designated score on mathematics placement test. R: 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: MTH 120 or MTH 124 or MTH 132 or MTH 152H or LBS 118. R: Open only to students in College of Natural Science.

Calculus based course in probability and statistics. Probability models, random variables. Estimation, confidence intervals, tests of hypotheses, simple linear regression with applications in sciences. SA: STT 331

290. Topics in Statistics and Probability

Fall, Spring, Summer. 1 to 3 credits. P: MTH 103. R: Approval of Department Individualized study of selected topics.

Introduction to Probability and Statistics for Business

Fall, Spring, Summer. 3(4-0)

P: MTH 120 or MTH 124 or MTH 132, R: 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.

317. Quantitative Business Research

Fall, Spring, Summer. 3(3-1) Interdepartmental with Marketing and Supply Chain Management. Administered by Marketing and Supply Chain Management.

P: STT 315. R: Open only to juniors and seniors in College of Business.

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.

35*1*. Probability and Statistics for Engineers Fall, Spring, Summer. 3(3-0)

P: MTH 234. R: Open only to juniors and seniors. Not

open to students with credit in STT 430.

Calculus based course in probability and statistics for engineers. Probability models and random variables. Estimation, confidence intervals, tests of hypotheses, simple linear regression. Other topics with applications to engineerin g.

421. Statistics I

Fall, Spring, Summer. 3(3-0)

P: MTH 103 or MTH 110 or MTH 116. R: 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, 1-way ANOVA.

422 Statistics II

Fall, Spring, Summer. 3(3-0)

P: STT 421. R: 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.

Introduction to Probability and Statistics

Fall. 3(3-0)

P: MTH 126 or MTH 133. R: Open only to Economics and Agricultural Economics majors. Not open to students with credit in STT 351.

Calculus based probability and statistics with applications. Discrete and continuous random variables and their expectations. Point and interval estimation, tests of hypotheses, simple linear regression.

Probability and Statistics I: Probability

Fall, Spring, Summer. 3(3-0)

P: MTH 234

Probability models and basic statistics at an intermediate mathematical level. Discrete, continuous, univariate, and multivariate distributions. Random variables. Normal approximation. Sampling distributions, parameter estimation, a nd elementary tests of hypotheses.

442. Probability and Statistics II: Statistics Spring. 3(3-0)

P: STT 441, MTH 314.

Estimation, tests of hypotheses, confidence intervals. Goodness of fit, non-parametric methods. Linear models, multiple regression, ANOVA.

461. Computations in Probability and Statistics

Spring. 3(3-0)

P: CPS 131 or CPS 230; MTH 314, STT 441.

Computer algorithms for evaluation, simulation and visualization. Sampling and prescribed distributions. Robustness and error analysis of procedures used by statistical packages. Graphics for data display, computation of probabilities a nd percentiles.

Statistical Methods for Biologists I 464.

Fall. 3(3-0) Interdepartmental with Animal Science, and Crop and Soil Sciences.

P: STT 421.

Biological random variables. Estimation of population parameters. Testing hypotheses. Linear correlation and regression (prediction). Analyses of counted and measured data to compare several biological groups (contingency tables and analysis of variance).

Statistical Methods for Biologists II

Spring. 3(3-0) Interdepartmental with Animal Science, and Crop and Soil Sciences.

P: STT 464.

Concepts of reducing experimental error: covariance, complete and incomplete block designs, latin squares, split plots, repeated-measures designs, regression applications, and response surface designs.