

- 678 Government and Corporate Veterinary Practice**
 Spring. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
 Study of government veterinary practice issues including state, federal and international regulatory medicine, state and federal public health, state and federal wildlife, military veterinary medicine, food safety, and animal control. Study of corporate veterinary practice pertaining to the pharmaceutical and chemical industries.
- 680 Food Animal Techniques**
 Spring. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
 Basic food animal techniques including surgery, anesthesia, diagnostic and therapeutic procedures.
- 681 Food Animal Production Medicine I**
 Spring. 3 credits. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
 Entry-level principles of production medicine as applied to food animal practice. Discussion and laboratory format.
- 682 Food Animal Production Medicine II**
 Fall, Spring. 3 credits. P:M: (LCS 681 or concurrently) RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
 Continuation of LCS 681. Farm evaluations and group problem-solving. Application and further development of skills and concepts.
- 683 Food Animal Production Medicine III**
 Spring. 3 credits. P:M: (LCS 682 or concurrently) RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
 Analysis of farm records and production medicine variables. Advanced production medicine topics. Individual, off-campus farm experiences required.
- 809 Special Problems in Large Animal Surgery**
 Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in Large Animal Clinical Sciences. Approval of department.
 Elective work in surgical research problems student's interest.
- 811 Special Problems in Large Animal Medicine**
 Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in the Department of Large Animal Clinical Sciences. Approval of department.
 Elective work in medicine-related research problems.
- 813 Seminar**
 Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to graduate students in Large Animal Clinical Sciences.
 Individualized program of seminar attendance culminating in a student-presented seminar relevant to a specific discipline.

- 825 Experimental Surgical Techniques for Animal Research**
 Fall of odd years. 2(1-2) RB: B.S. degree. R: Open only to graduate students. Approval of department.
 Humane treatment of research animals. Anesthesia, aseptic surgical techniques. Instrumentation for surgery, suture materials and patterns. Tissue handling and wound healing.
- 829 Design and Conduct of Epidemiological Studies and Clinical Trials**
 Spring. 3(2-2) Interdepartmental with Epidemiology. RB: (VM 533) or approval of department. R: Open only to graduate students in the colleges of Human Medicine, Osteopathic Medicine, or Veterinary Medicine.
 Applied analytical methods in experimental design. Assessment of health and disease status of animal and human populations. Risk assessment and interpretation of clinical trials.
- 830 Epidemiology of Foodborne Diseases and Food Safety: An Overview**
 Fall. 3(3-0) Interdepartmental with Epidemiology. RB: Advanced undergraduate courses in biology, microbiology, biological sciences, biochemical sciences, food technology. R: Approval of department.
 Epidemiologic survey of important foodborne diseases addressing recent trends. Sources of surveillance data. Measurement and management of risk factors associated with major foodborne diseases. Tracking foodborne pathogens from farm to table. Introduction to Hazard Analysis Critical Control Points (HACCP).
- 899 Master's Thesis Research**
 Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 18 credits in all enrollments for this course. R: Open only to graduate students in Large Animal Clinical Sciences
 Master's thesis research.
- 901 Investigating the Lung**
 Fall of even years. 2(2-0) Interdepartmental with Physiology; Pathology. R: Open only to graduate students.
 Integrative biology of the lung; structure and function; molecular, cellular, and organ responses to injury.
- 999 Doctoral Dissertation Research**
 Fall, Spring, Summer. 1 to 36 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open only to doctoral students in Large Animal Clinical Sciences.
 Doctoral dissertation research.

LATIN

LTN

**Department of French, Classics, and Italian
 College of Arts and Letters**

- 101 Elementary Latin I**
 Fall. 4(4-0) R: No previous experience in Latin or designated score on Latin placement test.
 Fundamentals of vocabulary, grammar, and syntax. Translation of elementary readings.
- 102 Elementary Latin II**
 Spring. 4(4-0) P:M: (LTN 101) or designated score on Latin placement test.
 Continued study of the fundamentals of vocabulary, grammar, and syntax. Translation of elementary readings.
- 122 Accelerated Elementary Latin**
 Fall of even years. 5(5-2) Not open to students with credit in LTN 101 or LTN 102.
 Accelerated introductory Latin, with emphasis on vocabulary, morphology, and syntax.
- 201 Latin Prose**
 Fall. 4(4-0) P:M: (LTN 102) or designated score on Latin placement test.
 Intermediate-level Latin prose based on readings of such authors as Sallust, Livy, and Cicero.
- 206 Nepos and Latin Prose**
 Fall of even years. 3(3-0) P:M: (LTN 102)
 Selected lives of Cornelius Nepos in the original Latin, with readings in other early and Republican prose authors.
- 208 Catullus and Lucretius**
 Spring of odd years. 3(3-0) P:M: (LTN 102)
 Readings from Catullus's poems and from Lucretius's "De Rerum Natura" in Latin with additional readings.
- 211 Livy and Roman Historiography**
 Fall of odd years. 3(3-0) P:M: (LTN 102)
 Selections from Livy's "Ab Urbe Condita" in the original Latin.
- 221 Virgil and Latin Poetry**
 Spring of even years. 3(3-0) P:M: (LTN 102)
 Readings from Virgil's "Eclogues", "Georgics", and "Aeneid" in Latin. Additional readings from other Latin poets of the later Republic and Augustan periods.
- 224 Accelerated Intermediate Latin**
 Spring of even years. 5(5-2) P:M: (LTN 102 or LTN 122) Not open to students with credit in LTN 206 or LTN 208 or LTN 211 or LTN 221.
 Accelerated intermediate Latin with emphasis on reading and Neo-Latin.
- 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.

Latin—LTN

- 306 The Works of Cicero (W)**
Fall of even years. 3(3-0) P:M: (LTN 208 or LTN 221) and completion of Tier I writing requirement.
Selected oratorical and philosophical works of Cicero in the original Latin.
- 308 Roman Comedy (W)**
Spring of odd years. 3(3-0) P:M: (LTN 221 or LTN 208) and completion of Tier I writing requirement.
Selected comedies of Plautus and Terence in the original Latin.
- 311 Augustine and His Age (W)**
Fall of odd years. 3(3-0) P:M: (LTN 221 or LTN 208) and completion of Tier I writing requirement.
The "Confessions" and other works of Augustine in the original Latin.
- 321 The Works of Ovid (W)**
Spring of odd years. 3(3-0) P:M: (LTN 208 or LTN 221) and completion of Tier I writing requirement.
Selected books of Ovid's "Metamorphoses" in the original Latin.
- 406 Senior Seminar: Tacitus (W)**
Fall of even years. 3(3-0) P:M: (LTN 308 or LTN 321) and completion of Tier I writing requirement.
Advanced study of the works of Tacitus in the original Latin.
- 408 Senior Seminar: Virgil (W)**
Spring of even years. 3(3-0) P:M: (LTN 308 or LTN 321) and completion of Tier I writing requirement.
Advanced study of the works of Virgil in the original Latin.
- 411 Senior Seminar: Petronius and Apuleius (W)**
Fall of odd years. 3(3-0) P:M: (LTN 321 or LTN 308) and completion of Tier I writing requirement.
Advanced study of Petronius and Apuleius in the original Latin.
- 421 Senior Seminar: Horace (W)**
Spring of even years. 3(3-0) P:M: (LTN 321 or LTN 308) and completion of Tier I writing requirement.
Advanced study of the works of Horace in the original Latin.
- 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: Not open to freshmen or sophomores. Approval of department.
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.
- 499 Senior Thesis**
Fall, Spring. 1(1-0) P:M: (LTN 308 or LTN 321) R: Approval of department. C: LTN 406 concurrently, LTN 408 concurrently, LTN 411 concurrently, LTN 421 concurrently.
Senior thesis capstone under the direction of a faculty member.

LINGUISTICS

Department of Linguistics and Germanic, Slavic, Asian and African Languages College of Arts and Letters

- 200 Introduction to Language**
Fall, Spring. 3(3-0) Not open to students with credit in LIN 401.
Linguistic structure of language. Applications of linguistics to other disciplines. Human and societal aspects of the nature, use, acquisition, and history of languages.
- 225 Women and Language**
Fall. 3(3-0) Interdepartmental with Women's Studies.
Women and language in societies around the world. Issues such as status and verbal politeness, importance of names, gender differences in language use, women's multilingualism, sexist language, gendered language development in children.
- 291 Special Topics in Linguistics**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
Special topics supplementing regular course offerings proposed by faculty on a group study basis.
- 401 Introduction to Linguistics**
Fall, Spring. 4(4-0) Not open to students with credit in LIN 200.
Basic goals, concepts, methods, and research results of modern theoretical and applied linguistics. Examples from a variety of languages.
- 411 History of Linguistics**
Spring. 3(3-0) P:M: (LIN 200 or LIN 401)
Origin and development of linguistic studies from ancient Greece to the present. Foundation for the understanding of contemporary issues in linguistics and in society.
- 424 Introduction to Phonetics and Phonology**
Fall, Spring. 3(3-0) P:M: (LIN 200 or LIN 401)
Phonetics, phonetics features and components, phonological phenomena, phonemic analysis, sound systems and data analysis.
- 431 Introduction to Morphology**
Spring. 3(3-0) RB: (LIN 401 or concurrently or LIN 200)
Word structure, word formation, morphological analysis, interface with phonology and syntax, and theoretical issues in morphology. Data from diverse languages of the world.
- 434 Introduction to Syntax**
Fall, Spring. 3(3-0) P:M: (LIN 200 or LIN 401)
Structure of sentences and structural relations among phrases. Methods of syntactic analysis and argumentation.
- 437 Semantics and Pragmatics**
Fall. 3(3-0) P:M: (LIN 200 or LIN 401)
Semantic properties and relations. Entailment, ambiguity, theories of word and sentence meaning, and logical form. Topics in pragmatics, such as presupposition, conversational implicature, speech acts.

LIN

- 441 Historical Linguistics**
Fall. 3(3-0)
Types of linguistic change and the methods used by linguists to study the historical development of languages and language families.
- 450 Child Language Acquisition**
Spring. 3(3-0) P:M: (LIN 200 or LIN 401)
Linguistic issues, perspectives and research on the acquisition of language by children. Phonology, lexicon, morphology, syntax, semantics. Universal principles, variation, contexts. Implications for related disciplines.
- 455 Neurolinguistics**
Fall. 3(3-0) P:M: (LIN 200 or LIN 401)
Theoretical approaches to the study of language and the brain. Perspectives on normal and impaired linguistic functioning offered by lesion studies and brain-imaging techniques. The genetic basis of language as evidenced in family and twin studies.
- 463 Introduction to Cognitive Science**
Spring. 3(3-0) Interdepartmental with Philosophy; Psychology. RB: (PHL 462 or LIN 401 or CSE 440 or PSY 200)
Cognitive processing of information by animals, humans, and computers. Relevant issues in philosophy, linguistics, psychology, neurophysiology, and artificial intelligence.
- 471 Sociolinguistics**
Fall. 3(3-0) P:M: (LIN 200 or LIN 401)
Linguistic and social psychological bases for language choice. Accounts of language variation and related larger constructs such as speech community, communicative competence, dialect, and language change.
- 475 Introduction to Computational Linguistics**
Fall. 3(3-0) Interdepartmental with Computer Science and Engineering. P:M: (CSE 232 and LIN 401)
Computer science of linguistic theories and their application in natural language processing systems. Stochastic and categorical automata for morphological analysis. Rule systems for grammars. Parsing algorithms for syntactic and semantic analysis, with implications for cognitive models of human sentence processing. Probabilistic models of linguistic events.
- 490 Independent Study**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 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.
- 491 Special Topics**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P:M: (LIN 200 or LIN 401) R: Approval of department.
Special topics supplementing regular course offerings proposed by faculty on a group study basis.
- 499 Senior Thesis Research (W)**
Fall, Spring. 2 credits. P:M: Completion of Tier I writing requirement. R: Approval of department.
Individual research project supervised by a faculty member. Demonstration of student's ability to conduct independent research and prepare an undergraduate thesis.