

**Descriptions —Large Animal Clinical Sciences of Courses**

**638. Beef Production Medicine**  
*Fall, Spring, Summer. 3 credits.*  
*P: LCS 630 or LCS 631 or LCS 636 or LCS 643. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.*  
 Veterinary management of production and health of beef cattle. Visits to out-of-state facilities may be required.

**639. Small Ruminant Medicine**  
*Fall, Spring, Summer. 3 credits.*  
*R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.*  
 Health care to small ruminants on an individual and flock/herd basis. Emphasis on sheep.

**640. Large Animal Anesthesia Clerkship**  
*Fall, Spring, Summer. 3 credits.*  
*may earn a maximum of 6 credits in all enrollments for this course.*  
*P: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 656.*  
 Concepts and supervised practice in large animal anesthesiology.

**641. Food Animal Theriogenology**  
*Fall, Spring, Summer. 3 credits.*  
*P: LCS 643. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.*  
 Techniques for evaluating the reproductive performance of food animal individuals and populations. Emphasis on cattle. Farm visits.

**643. Food Animal Fundamentals**  
*Fall, Spring, Summer. 3 credits.*  
*R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.*  
 Skills related to food animal veterinary practice.

**677. Veterinary Preceptorship**  
*Fall, Spring, Summer. 3 credits.*  
*P: LCS 620 or LCS 621 or LCS 630 or LCS 631. R: Not open to students with credit in LCS 674 or VM 610 or VM 611.*  
 Applied large animal clinical science in private practices. Supervised off-campus experience.

**678. Government and Corporate Veterinary Practice**  
*Fall, Spring. 3 credits.*  
*P: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.*  
 Preparation for employment in government and corporate veterinary practice.

**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 Large Animal Clinical Sciences. Approval of department.*  
 Elective work in medicine related research problems student's interest.

**813. Seminar**  
*Fall, Spring, Summer. 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 or Small Animal Clinical Sciences. Approval of department.*  
 Presentation and discussions of current topics by graduate students, faculty, or outside speakers.

**825. Experimental Surgical Techniques for Animal Research**  
*Fall of odd-numbered years. 2(1-2)*  
*P: 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.

**827. Comparative Theriogenology**  
*Spring of even-numbered years. 2(2-0)*  
*P: VM 580. R: Open only to graduate students in Large Animal Clinical Sciences or Small Animal Clinical Sciences. Approval of department.*  
 Comparative pathophysiology of reproductive systems of domestic animals. Emphasis on clinical theriogenology.

**828. Tropical Animal Health**  
*Spring. 2(2-0)*  
*R: Open only to graduate-professional students in College of Human Medicine, College of Osteopathic Medicine, College of Veterinary Medicine. Approval of department.*  
 Animal health in the tropics. Impact on agriculture, the livestock industry, and human welfare.

**829. Design and Conduct of Epidemiological Studies and Clinical Trials**  
*Spring. 3(2-2)*  
*Interdepartmental with Human Medicine.*  
*P: 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.

**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. Approval of department.*

**901. Investigating the Lung**  
*Fall of even-numbered years. 3(3-0)*  
*Interdepartmental with Physiology and Pathology.*  
*R: Open only to M.S. and Ph.D. students in Large Animal Clinical Sciences, Small Animal Clinical Sciences, Physiology, and Pathology. Approval of department.*  
 Classic and current concepts of respiratory structure and function in health and disease. Mechanisms of lung 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 graduate students in Large Animal Clinical Sciences. Approval of department.*

**LATIN LTN**  
**Department of Romance and Classical Languages**  
**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: LTN 101 or designated score on Latin placement test.*  
 Continued study of the fundamentals of vocabulary, grammar, and syntax. Translation of elementary readings.

**201. Latin Prose**  
*Fall. 4(4-0)*  
*P: LTN 102 or designated score on Latin placement test.*  
 Intermediate-level Latin prose based on readings of such authors as Sallust, Livy, and Cicero.

**202. Latin Poetry**  
*Spring. 4(4-0)*  
*P: LTN 201.*  
 Intermediate-level Latin poetry of the Republic and Augustan periods.

**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.

**301. Republican Prose and Poetry (W)**  
*Fall of even-numbered years. 3(3-0)*  
*P: LTN 202. R: Completion of Tier I writing requirement.*  
 Cicero, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius.

**302. Augustan Poetry (W)**  
*Spring of odd-numbered years. 3(3-0)*  
*P: LTN 202. R: Completion of Tier I writing requirement.*  
 Poetry of Virgil, Horace, Propertius, Tibullus, and Ovid.

**401. Augustan and Early Imperial Prose**  
*Fall of odd-numbered years. 3(3-0)*  
*P: LTN 301 or LTN 302.*  
 Augustan and Early Imperial prose writers. Livy, Augustus, Tacitus, Petronius, Suetonius, and others.

**402. Imperial Poetry**  
*Spring of even-numbered years. 3(3-0)*  
*P: LTN 301 or LTN 302.*  
 Poets of the Empire: Lucan, Seneca, Persius, Juvenal, Silius Italicus, Statius, and others.

**490. Independent Study**  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.  
R: Not open to freshmen and 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. 3 credits.  
P: LTN 402. R: Approval of department.  
Senior thesis under the direction of a faculty member.

## LINGUISTICS

## LIN

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

**140. Languages of the World**  
Spring. 3(3-0)  
Survey of world linguistic diversity: language and dialect, language families, diversification, and language death. Survey of major languages, language types, and writing systems. Bilingualism and multilingualism. Case studies concerning relation of language and nationhood, education, and religion.

**200. Introduction to Language**  
Fall, Spring. 3(3-0)  
R: 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.

**271. Language in Society**  
Fall, Spring. 3(3-0)  
R: Not open to students with credit in LIN 471.  
Sociolinguistic values of languages and their varieties. Origin, status and function of language varieties in social settings. Factors influencing language change and maintenance in individuals and social groups.

**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.

**360. Postcolonial Literature and Theory**  
Fall, Spring. 3 credits. Interdepartmental with English and Romance Languages. Administered by English.  
P: 3 credits of literature. R: Completion of Tier I writing requirement.  
Theories and literatures involving colonialism, decolonization, neocolonialism, cultural and political independence. Texts drawn principally from Asia, Africa, the Caribbean, Latin America and various diaspora communities.

**401. Introduction to Linguistics**  
Fall, Spring. 4(4-0)  
R: 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**  
Fall. 3(3-0)  
P: 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. Phonology**  
Fall, Spring. 3(3-0)  
P: LIN 200 or LIN 401.  
Sounds and sound systems: articulatory phonetics, phonetic features and components, classical phonemics, and phonology in contemporary linguistic theories.

**431. Morphological and Syntactic Phenomena**  
Spring. 4(4-0)  
P: LIN 424 or concurrently.  
Structure of words, phrases, clauses, and sentences. Relations among words. Examples from languages of the world, and formal methods for their description.

**434. Syntax**  
Fall, Spring. 3(3-0)  
P: LIN 200 or LIN 401.  
Structure of sentences and structural relations among sentences. Methods of syntactic analysis and argumentation.

**437. Semantics and Pragmatics**  
Fall. 3(3-0)  
P: LIN 200 or LIN 401 or approval of department.  
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.

**441. Historical Linguistics**  
Spring. 3(3-0)  
P: LIN 431 or concurrently.  
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: 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.

**461. Second Language Acquisition**  
Fall. 3 credits. Interdepartmental with English. Administered by English.  
R: Not open to freshmen or sophomores except with approval of department. Completion of Tier I writing requirement.  
Factors in second language learning such as age, motivation, language input and interaction, social influences, the role of the native language, and language universals.

**463. Introduction to Cognitive Science**  
Spring. 3(3-0) Interdepartmental with Philosophy and Psychology. Administered by Philosophy.  
P: PHL 462 or PSY 200 or LIN 401 or CPS 440.  
Cognitive processing of information by animals, humans, and computers. Relevant issues in philosophy, linguistics, psychology, neuropsychology, and artificial intelligence.

**471. Sociolinguistics**  
Fall. 3(3-0)  
P: 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.

**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: 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.  
R: Completion of Tier I writing requirement. Approval of department.  
An individual research project supervised by a faculty member that demonstrates the student's ability to do independent research and submit or present a major paper.

**810. Theory and Practice of Teaching a Non-European Language**  
Fall. 3(3-0)  
P: LIN 401; proficiency in the language. R: Not open to students with credit in GRM 810 or RUS 804 or FRN 800 or SPN 800 or ENG 807 or ENG 808.

Theories and practice of college-level teaching of a non-European language (e.g., Japanese) to non-native speakers. Teaching of pronunciation, writing system, listening, speaking, reading, writing, and culture. Testing, contrastive grammar, error analysis, material development, curriculum design, and lesson planning.

**813. Foundations of American Structuralism**  
Fall of even-numbered years. 3(3-0)  
P: LIN 431.  
Critical reading of basic texts in linguistics from 1900 to the 1960s with primary emphasis on American structuralism and its major derivatives.

**815. Stratificational Linguistics**  
Fall of odd-numbered years. 3(3-0)  
P: LIN 431.  
Theory of language developed by Sydney M. Lamb and its application to grammatical, semological, and phonological phenomena. The relation of stratificational theory to other views of language.

**824. Issues in Phonology**  
Spring. 3(3-0)  
P: LIN 424.  
Theories, current issues, and research in the study of the sound systems of language. Methods of phonological analysis and argumentation.

**834. Issues in Syntax**  
Spring. 3(3-0)  
P: LIN 434.  
Theories, current issues, and research in the study of the structure of sentences and structural relations among sentences. Methods of syntactic analysis and argumentation.

**837. Advanced Studies in Semantics and Pragmatics**  
Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LIN 437.

Selected topics in semantics and/or pragmatics, such as noun phrase interpretation, tense and aspect, conversational implicature, and negation. Advanced level analytical techniques.

**850. Advanced Studies in Child Language Acquisition**  
Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LIN 450.

Children's native language acquisition: research methods, crosslinguistic data, and explanations from linguistic theory. Topics such as learnability, parameters, innateness, narratives, individual variation, and bilingualism.