

## Large Animal Clinical Sciences—LCS

- 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

### 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: (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 years. 3(3-0) P: (LTN 202) and completion of Tier I writing requirement.  
Cicero, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius.
- 302 Augustan Poetry (W)**  
Spring of odd years. 3(3-0) P: (LTN 202) and completion of Tier I writing requirement.  
Poetry of Virgil, Horace, Propertius, Tibullus, and Ovid.
- 401 Augustan and Early Imperial Prose**  
Fall of odd years. 3(3-0) P: (LTN 302)  
Augustan and Early Imperial prose writers. Livy, Augustus, Tacitus, Petronius, Suetonius, and others.
- 402 Imperial Poetry**  
Spring of even years. 3(3-0) P: (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 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. 3 credits. P: (LTN 402) R: Approval of department.  
Senior thesis under the direction of a faculty member.

## LTN

## 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: (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: (LIN 200 or LIN 401)  
Phonetics, phonetics features and components, phonological phenomena, phonemic analysis, sound systems and data analysis.
- 428 Writing Systems**  
Fall of odd years. 3(3-0) P: (LIN 200 or LIN 401)  
Writing systems of the world and their history and organization in the context of linguistic science. Special attention is given to the typology of these systems and the ways they relate to the structure of spoken language.
- 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: (LIN 200 or LIN 401)  
Structure of sentences and structural relations among phrases. Methods of syntactic analysis and argumentation.

## LIN

- 437 Semantics and Pragmatics**  
Fall. 3(3-0) P: (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.
- 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: (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: (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: (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: (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: (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: 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.
- 810 Theory and Practice of Teaching a Non-European Language**  
Fall. 3(3-0) RB: (LIN 401) and proficiency in the language. Not open to students with credit in ENG 807 or ENG 808 or FRN 800 or GRM 810 or RUS 804 or SPN 800.  
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.
- 824 Phonological Theory I**  
Spring. 3(3-0) RB: (LIN 424)  
Major phonological theories, argumentation, and advanced skills of phonological analysis.
- 825 Phonological Theory II**  
Fall. 3(3-0) RB: (LIN 824)  
Issues in phonology. Current controversies and trends of research in phonology.
- 834 Syntactic Theory I**  
Spring. 3(3-0) P:M: (LIN 434)  
Theories, current issues, and research of the structure of sentences and structural relations among phrases. Methods of syntactic analysis and argumentation.
- 835 Syntactic Theory II**  
Fall. 3(3-0) P:M: (LIN 834)  
Issues in syntax. Current research and controversies.
- 837 Advanced Studies in Semantics and Pragmatics**  
Fall of odd years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. RB: (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. RB: (LIN 434)  
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.
- 855 Advanced Studies in Neurolinguistics**  
Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. RB: (LIN 434 or LIN 424 or LIN 455)  
Study of the computation of language in the brain and its contribution to understanding brains and language. Lesion research and research using neuroimaging techniques such as Magnetoencephalography (MEG), Electroencephalography (EEG), Positron Emission Tomography (PET), functional Magnetic Resonance Imaging (fMRI), and Transcranial Magnetic Stimulation (TMS).
- 867 Nature and Practice of Cognitive Science**  
Spring. 3(3-0) Interdepartmental with Zoology; Psychology; Philosophy; Computer Science and Engineering. Administered by Department of Zoology. RB: Undergraduate course work in behavioral biology, cognitive psychology, philosophy, linguistics, or artificial intelligence.  
Survey of how different disciplines explore the cognitive processes underlying intelligent behavior.
- 871 Advanced Studies in Sociolinguistics**  
Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. RB: (LIN 471)  
Linguistic and societal bases for language choice. Topics exemplifying modern sociolinguistics including concerns of power, politeness, gender, quantitative microsociolinguistics, social/cultural differences, and ethnomethodology.
- 875 Advanced Computational Linguistics**  
Spring. 3(3-0) Interdepartmental with Computer Science and Engineering. P:M: (LIN 475)  
Cutting-edge research in computational linguistics. Expressive formalisms such as tree-adjoining, typological and multi-component string grammars, and their associated parsing and learning problems. Robustness for spoken language understanding. Mathematical theories of language learnability. Logic and probability of finite state techniques.
- 881 The Structure of a Non-European Language**  
Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: (LIN 424 and LIN 434) Not open to students with credit in ENG 845 or ENG 846 or FRN 806 or GRM 805 or RUS 806 or SPN 806 or SPN 806.  
Survey of the structure of a non-European language; e.g., Amharic, Chinese, Japanese, Hausa. General overview of the language, including history, phonology, morphology, syntax, semantics, pragmatics, discourse and variation. Particular attention to the features generally nonexistent in European languages.
- 890 Independent Study**  
Fall, Spring, Summer. 1 to 4 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**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: At least 6 credits in linguistics courses at the 400 level or above.  
Special topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.
- 892 Seminar in Linguistics**  
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: At least 6 credits in linguistics courses at the 400 level or above. R: Open only to graduate students in the Linguistics major.  
Directed original research on current topic in linguistics.

## Linguistics—LIN

**898 Master's Research**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Approval of department.

Directed research in support of Plan B master's degree requirements.

**899 Master's Thesis Research**  
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree requirements.

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

Doctoral dissertation research.

**250C Topics in National Cinemas: Israeli Cinema**  
Spring. 3(3-2)  
Development of Israeli cinematic styles and traditions in their historical and social context. Major films and directors. Introduction to film technique and analysis. Taught in English.

**250D Topics in National Cinemas: Russian and Soviet Cinema**  
Spring. 3(3-2)  
Development of Russian and Soviet cinematic styles and traditions in their historical and social context. Major films and directors. Introduction to film technique and analysis. Taught in English.

**251 Intermediate Individualized Less Commonly Taught Language I**  
Fall. 4(4-1) A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Intermediate-level individualized work on speaking, reading and writing a less commonly taught language. Continued development of oral proficiency skills.

**252 Intermediate Individualized Less Commonly Taught Languages II**  
Spring. 4(4-1) A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Further intermediate-level individualized work on speaking, reading and writing a less commonly taught language. Continued development of oral proficiency skills.

**261 Advanced Less Commonly Taught Language I**  
Fall. 4(4-0) A student may earn a maximum of 8 credits in all enrollments for this course. RB: Oral proficiency in the language learned in the home or in a bilingual school environment. R: Approval of department.

Advanced-level language class specifically for the heritage language speaker who acquired oral proficiency in the language at home or in a bilingual school environment. Development of advanced level oral and aural skills, as well as academic competence in the written language and acquisition of the writing system.

**262 Advanced Less Commonly Taught Language II**  
Spring. 4(4-0) A student may earn a maximum of 8 credits in all enrollments for this course. RB: Oral proficiency in the language learned in the home or in a bilingual school environment. R: Approval of department.

Further advanced-level language study specifically for the heritage language speaker who acquired oral proficiency in the language at home or in a bilingual school environment. Development of near-native oral and aural skills, as well as native-like mastery of the written language and writing system.

**290 Independent Study**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department.

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

**352 Asian American Writing**  
Spring. 3(3-0) Interdepartmental with English. Administered by Department of English. P: Completion of Tier I writing requirement. RB: 3 credits of literature.

Writing by Americans of Asian descent. Attention to artistic, historical, and cultural contexts.

**361 Asian Literature in English or in English Translation**  
Spring. 3(3-0) Interdepartmental with English. Administered by Department of English. P: Completion of Tier I writing requirement. RB: 3 credits of literature.

Literary traditions of a major Asian civilization--Chinese, Indian or Japanese. Historical, cultural, and international contexts of Asian literature.

**380 Methods of Teaching Foreign Languages**  
Spring of odd years. 3(3-0) P: (GRM 202 or RUS 202 or CHS 202 or JPN 202) R: Open only to undergraduate students in the East Asian Languages and Cultures or German or Russian major with a teacher certification option or in the German or Japanese or Russian minor available for teacher certification.

Methods of teaching Germanic, Slavic, Asian, and African languages for teacher education candidates. Theories of second language acquisition and practical application of teaching strategies.

**413 Slavic Language I**  
Fall. 4(4-1) A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department. SA: RUS 413

Development of skills in speaking, reading, listening comprehension, and writing in a Slavic language other than Russian.

**413A Polish I**  
Fall. 4(4-1) R: Approval of department. SA: RUS 413A

Development of skills in speaking, reading, listening comprehension, and writing in Polish.

**414 Slavic Language II**  
Spring. 4(4-1) A student may earn a maximum of 8 credits in all enrollments for this course. P: (LL 413) R: Approval of department. SA: RUS 414

Further development of skills in speaking, reading, listening comprehension, and writing in a Slavic language other than Russian.

**414A Polish II**  
Spring. 4(4-1) P: (LL 413A) R: Approval of department. SA: RUS 414A

Further development of skills in speaking, reading, listening comprehension, and writing in Polish.

**474 Aesthetic Theory and Modernism**  
Fall. 4(4-0) Interdepartmental with Philosophy; English; History of Art; Music; Romance Languages. Administered by Department of Philosophy. R: Not open to freshmen or sophomores.

Problems, assumptions, and arguments of modern aesthetic theory examined in the context of debates over modernity and modernist artistic practice.

**490 Independent Study**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department.

Special projects in linguistics and languages arranged by an individual student and a faculty member in areas supplementing regular course offerings

**821 Proseminar in Comparative Literature**  
Fall. 3(3-0) Interdepartmental with Arts and Letters; English; Romance Languages. Administered by College of Arts and Letters. R: Open only to graduate students in the College of Arts and Letters.

History and practice of comparative literature including foundational concepts and current directions.

## LINGUISTICS AND LANGUAGES

LL

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

**151 Beginning Individualized Less Commonly Taught Languages**  
Fall. 4(4-1) A student may earn a maximum of 12 credits in all enrollments for this course. RB: No prior experience learning the language. Students' language ability will be assessed in the first few days of the course.

Individualized study of any of the less commonly taught languages at the elementary level. Speaking, reading, and writing. Development of oral proficiency skills.

**152 Beginning Individualized Less Commonly Taught Languages II**  
Spring. 4(4-1) A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.

Further individualized work on speaking, reading and writing a less commonly taught language. Continued development of oral proficiency skills.

**250A Topics in National Cinemas: German Cinema**  
Spring. 3(3-2)

Development of German cinematic styles and traditions in their historical and social context. Major films and directors. Introduction to film technique and analysis. Taught in English.

**250B Topics in National Cinemas: East Asian Cinema**  
Spring. 3(3-2)

Development of East Asian cinematic styles and traditions in their historical and social context. Major films and directors. Introduction to film technique and analysis. Taught in English.