#### 461 **Second Language Acquisition**

Fall. 3(3-0) P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores. Approval of department. SA: ENG 461

Factors in second language learning such as age, motivation, language input and interaction, social influences, the role of the native language, and language universals.

### 807 Methods of Teaching English to Speakers of Other Languages

Spring. 3(3-0) R: Open only to graduate students in College of Arts and Letters. SA: **FNG 807** 

Approaches, methods, and materials for teaching English to non-native speakers, including the teaching of listening, speaking, reading, and writing. Selection and evaluation of materials, lesson planning, and management of activities and materials.

### 808 Studies in Teaching English to Speakers of Other Languages

Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. RB: (ENG 807) R: Open only to master's students in English-Teaching of English to Speakers of Other Languages. SA: ENG 808

Methodology of selected areas in teaching English to non-native speakers. Materials development and syllabus design. Program administration and evaluation. Instructional evaluation. Testing methods and materials. Major contemporary issues.

## Topics in Second/Foreign Language 841 Learning and Teaching

Fall, Spring. 3(3-0)

Selected topics and issues in second/foreign language learning and teaching.

# **English Structures and Functions**

Spring. 3(3-0) R: Open only to master's students in English-Teaching of English to Speakers of Other Languages. SA: ENG

Phonological, morphological, grammatical, lexical, discourse and pragmatic systems of English, including historical origins and social, regional, and gender variations. Application to the teaching of English to speakers of other languages.

## Research Methods for Language 872 Teaching and Foreign/Second Language Learning

Fall, Spring. 3(3-0) RB: (LLT 807 and LLT 461)

Concepts and procedures for designing and conducting research in second/foreign language learning and teaching.

#### 890 **Independent Study**

Fall, Spring, Summer. 1 to 6 credits. student may earn a maximum of 8 credits in all enrollments for this course.

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

## 896 Practicum in Teaching English as a Second Language

Spring. 3(3-1)

Syllabus and lesson plan development for a sixweek English as a Second Language course. Team teach in a community setting.

### 897 Teaching English as a Second Language Spring. 3(3-0)

Teaching of pedagogical skills and grammar at different proficiency levels.

## Master's Research

Fall, Spring, Summer. 1 to 6 credits. student may earn a maximum of 6 credits in all enrollments for this course.

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

## 899

Master's Thesis Research Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

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

### 992B Seminar in English as a Second Language

Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to doctoral students in the College of Arts and Letters or approval of department. SA: ENG 992B

Contemporary theories and issues relating to learning English as a second language.

## LARGE ANIMAL **CLINICAL SCIENCES** LCS

# **Department of Large Animal** Clinical Sciences College of Veterinary Medicine

# **Hazard Analysis and Critical Control Points in Production Medicine**

Spring. 2(2-0) R: Not open to freshmen. Not open to graduate-professional students in the College of Veterinary Medicine.

Animal disease and health in relation to livestock production, food safety and public health. Production medicine and the ability to develop hazard analysis critical control points (HACCP) strategies for animal disease management.

# **Problems in Large Animal Clinical** Sciences

Fall, Spring, Summer. 1 to 3 credits. student may earn a maximum of 6 credits in enrollments for this course. R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine or approval of department.

Advanced clinical training in a problem related to large animal clinical sciences.

## Research Problems in Large Animal **Clinical Sciences**

Fall, Spring, Summer. 1 to 3 credits. student may earn a maximum of 6 credits in enrollments for this course. R: Completion of semester 5 of the graduateprofessional program in the College of . Veterinary Medicine or approval department.

Research related to a large animal specialty

### 613 Off-Campus Problems in Large Animal Clinical Sciences

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Completion of Semester 5 of the graduate-professional program in the College of Veterinary Medicine. Approval of department.

Advanced clinical-phase training in an off-campus setting in a specific problem related to large animal clinical sciences, for which on-campus training is not available. The students specific training objective will be developed and approved from both an oncampus liaison and the off-campus liaison.

#### Equine Clinical Clerkship I 620

Fall, Spring, Summer. 3 credits. Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Supervised practice in equine medicine and surgery. Diagnosis, prognosis, treatment, and disease prevention. Required clerkship.

#### **Equine Practice Clerkship** 621

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Supervised, off-campus experience in an assigned veterinary practice. Regular equine farm calls. After-. Veterinary hours emergencies. practice management.

#### 622 Equine Clinical Clerkship II

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (LCS 620) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Advanced general training in equine medicine and surgery.

## 623 **Equine Musculoskeletal Diseases** Clerkship

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduateprofessional program in the College of

Veterinary Medicine.

Techniques and procedures used for the diagnosis and management of equine musculoskeletal diseases. Hospital and field cases.

#### 624 **Equine Theriogenology Clerkship**

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Emphasis on diagnostic methods utilized in equine

#### **Equine Herd Health Clerkship** 625

Fall, Spring. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Establishing and maintaining equine herd health Reproduction, parasite programs. control immunization, and diagnostic medicine and surgery in the field.

#### 626 **Advanced Equine Surgery**

Fall, Spring, Summer. 3 credits. RB: (LCS 620 and LCS 622) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Advanced, in-depth training in overall surgical management of equine surgical patients. Emphasis on breeds used for racing or sport.

## **Advanced Equine Medicine**

Spring. 3 credits. RB: (LCS 620) R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Advanced, in-depth training in the medical management of equine patients. Emphasis on neonates

### 628 Techniques in Equine Anesthesia and Surgery

Fall, Spring, Summer. 3 credits. RB: (LCS 620 and LCS 622 and LCS 640) R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Advanced equine anesthesia and surgery. Preoperative care of University-owned equids, induction of anesthesia, and performance of minor surgical procedures.

### 630 **Food Animal Medicine and Surgery** Clerkship

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Principles of diagnosis, treatment and prevention of diseases in food and fiber animals. Provides in-clinic and on-farm experience. Required clerkship.

#### Food Animal Practice Clerkship 631

Fall, Spring, Summer. 3 credits. Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Supervised, off-campus experience in an assigned veterinary practice. Regular food animal farm calls. After-hours emergencies. Veterinary practice management.

### 632 Advanced Food Animal Medicine and Surgery Clerkship

Fall, Spring, Summer. 3 credits. RB: (LCS 630) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

In-depth, supervised food animal medicine and surgery.

#### 634 **Swine Production Medicine Clerkship**

Fall, Spring, Summer. 3 credits. Permission of course moderator R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Swine diseases and related production problems encountered in swine herd health programs.

#### 637 **Advanced Dairy Production Medicine**

Fall, Spring, Summer. 3 credits. RB: (LCS 633 and LCS 643) or permission of course moderator R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Topics related to enhancing profitability, decreasing disease, and improving management of dairy farms.

#### 638 **Beef Production Medicine**

Fall. 3 credits. RB: (LCS 630 or LCS 631) and (LCS 643) or permission of course moderator. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Veterinary management of production and health of beef cattle. Optional visits to out-of-state facilities may be offered.

## **Small Ruminant Medicine**

Fall, Spring, Summer. 3 credits. RB: (LCS 643) or permission of course moderator R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Health care to small ruminants on an individual and flock or herd basis. Emphasis on sheep.

#### Large Animal Anesthesia Clerkship 640

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Concepts and supervised practice in large animal anesthesiology.

## 641

Food Animal Theriogenology
Fall, Spring, Summer. 3 credits. RB: (LCS 630 and LCS 643) or permission of course moderator R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Techniques for evaluating the reproductive performance of food animal individuals and populations. Emphasis on cattle. Farm visits.

#### 646 **Equine Neonatal Medicine Clerkship**

Summer. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Principles of breeding farm management and and treatment of equine neonatal diagnosis disorders. Supervised, in-clinic experience. Elective clerkship.

#### Veterinary Preceptorship 677

Fall, Spring, Summer. 3 credits. RB: (LCS 620 or LCS 621 or LCS 630 or LCS 631) R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Applied large animal clinical science in private practices. Supervised off-campus experience.

# **Government and Corporate Veterinary Practice**

Spring. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Preparation for employment in government and corporate veterinary practice.

## 680 **Food Animal Techniques**

Spring. 3 credits. R: 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: (LCS 680) or approval of department. R: 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

Spring. 3 credits. P:M: (LCS 681) R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.
Continuation of LCS 681 involving farm evaluations

and group problem solving. Application and further development of skills and concepts introduced in LCS 681.

#### 683 Food Animal Production Medicine III

Spring. 3 credits. P:M: (LCS 682) R: Completion of semester 5 of the graduateprofessional program in the College of Veterinary Medicine.

Individual, on-farm experiences approximately one week. Analysis of farm records and production medicine variables. Advanced production medicine topics.

## Special Problems in Large Animal 809

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

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 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.

## **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

3(2-2) Interdepartmental Epidemiology. RB: (VM 533) or approval of department. R: Open only to graduate students in the colleges of Human Medicine, Osteopathic Medicine, or 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.

## **Epidemiology of Foodborne Diseases** 830 and Food Safety: An Overview

with 3(3-0) Interdepartmental 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

#### 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.

#### 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.

## Latin Poetry

Spring. 4(4-0) P:M: (LTN 201)

Intermediate-level Latin poetry of the Republic and Augustan periods.

# 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.

# Republican Prose and Poetry (W)

Fall of even years. 3(3-0) P:M: (LTN 202) and completion of Tier I writing requirement.

Cicero, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius.

# Augustan Poetry (W)

Spring of odd years. 3(3-0) P:M: (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:M: (LTN 302) Augustan and Early Imperial prose writers. Livy, Augustus, Tacitus, Petronius, Suetonius, and others.

# Imperial Poetry

Spring of even years. 3(3-0) P:M: (LTN 302) Poets of the Empire: Lucan, Seneca, Persius, Juvenal, Silius Italicus, Statius, and others.

# 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.

# **Senior Thesis**

Fall, Spring. 3 credits. P:M: (LTN 402) R: Approval of department.

LIN

Senior thesis under the direction of a faculty member

### 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 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.

# LINGUISTICS

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

# 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.

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.

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.

## Introduction to Phonetics and Phonology 424 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.

#### 428 Writing Systems

Fall of odd years. 3(3-0) P:M: (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.

# Morphological and Syntactic Phenomena Fall. 4(4-0) P:M: (LIN 424 or concurrently) 431

Structure of words, phrases, clauses, and sentences. Relations among words. Examples from languages of the world, and formal methods for their description.

# 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.

# **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

## **Historical Linguistics** 441

Fall. 3(3-0)

Types of linguistic change and the methods used by linguists to study the historical development of languages and language families.