LCS—Large Animal Clinical Sciences

Department of Large Animal Clinical Sciences
College of Veterinary Medicine

412 Hazard Analysis and Critical Control Points in Production Medicine
Fall, Spring. 2(2-2) 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.

610 Problems in Large Animal Clinical Sciences
Fall, Spring. Summer. 1 to 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 or approval of department. Advanced clinical training in a problem related to large animal clinical sciences.

620 Equine Clinical Clerkship I
Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Supervised practice in equine medicine and surgery. Diagnosis, prognosis, treatment, and disease prevention. Required clerkship.

621 Equine Practice Clerkship
Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Supervised, off-campus experience in an assigned veterinary practice. Regular equine farm calls. After-hours emergencies. Veterinary 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. 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 graduate-professional program in the College of Veterinary Medicine. Techniques and procedure 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 graduate-professional program in the College of Veterinary Medicine. Emphasis on diagnostic methods utilized in equine reproduction.
Large Animal Clinical Sciences–LCS

625 Equine Herd Health Clerkship
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 programs. Reproduction, parasite control, immunization, and diagnostic medicine and surgery in the field.

626 Advanced Equine Surgery
Fall, Spring, Summer. 3 credits. P:NM: (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.

627 Advanced Equine Medicine
Spring. 3 credits. P:NM: (LCS 620) R: Completion of semester 5 of the graduate-professional 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. P:NM: (LCS 620 and LCS 622 and LCS 640) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

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.

631 Food Animal Practice Clerkship
Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduate-professional 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. P:NM: (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.

633 Dairy Production Medicine Clerkship
Fall, Spring, Summer. 3 credits. P:NM: (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.
Dairy farm and herd health management. Record keeping, general management, housing, nutrition. Mastitis control.

634 Swine Production Medicine Clerkship
Fall, Spring. 3 credits. P:NM: Permission of course moderator R: Completion of semester 5 of the graduate-professional 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. P:NM: (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. P:NM: (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.

639 Small Ruminant Medicine
Fall, Spring, Summer. 3 credits. P:NM: (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.

640 Large Animal Anesthesia Clerkship
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. P:NM: (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.

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

644 Nutritional Fundamentals
Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Application of basic nutrition principles to commercial dairy, beef, and sheep feeding systems. Estimation of nutrient requirements and evaluation of diets and feeding management. Ration formulation and nutritional assessment. Problem solving and field work required.

645 Ruminant Nutrition Clerkship
Summer. 3(2-1) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Application of basic nutrition principles to commercial dairy, beef, and sheep feeding systems. Estimation of nutrient requirements and evaluation of diets and feeding management. Ration formulation and nutritional assessment. Problem solving and field work required.

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

677 Veterinary Preceptorship
Fall, Spring, Summer. 3 credits. P:NM: (LCS 620 or LCS 621 or LCS 630 or LCS 631) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.
Applied large animal clinical science in private practice. Supervised off-campus experience.

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.

825 Experimental Surgical Techniques for Animal Research
Fall of odd years. 2(1-2) P:NM: 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. P:NM: (VM 533) or approval of department. R: Open only to graduate students in the colleges of Human Medicine. Osteopathic Medicine, or Veterinary Medicine.
999 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 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:M: (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: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.

202 Latin Poetry
Fall. 4(4-0) P:M: (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:M: (LTN 202) and completion of Tier I writing requirement. Ciceronian, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius.

302 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.

402 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.

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:M: (LTN 402) R: Approval of department.
Senior thesis under the direction of a faculty member.

LINGUISTICS

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

140 Languages of the World
Spring. 3(3-0)

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 6 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(3-0) Interdepartmental with English; Romance Languages. Administered by Department of English. P:M: Completion of Tier I writing requirement. P:NM: 3 credits of literature, SA: LL 360.
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) 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.

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.

431 Morphological and Syntactic Phenomena
Fall. 4(4-0) P:M: (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 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.

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.