

480. Professional Practice (W)
Fall. 3(2-2) P: LA 443. R: Open only to seniors and graduate students in Landscape Architecture. Completion of Tier I writing requirement.

Principles and procedures of professional office practice. Organization and management of offices, personnel, and projects. Ethical and legal issues.

483. Historic Preservation and Preservation Planning in the U.S.

Fall. 4(4-0) Interdepartmental with Urban Planning; and History of Art. Administered by Urban Planning. R: Not open to freshmen and sophomores. Approval of department.

History and philosophy of the preservation of buildings, structures, and objects significant to the heritage of this nation. Preservation as a planning tool for local governments.

489. Seminar in Zoo and Aquarium Science

Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Zoology; Park, Recreation and Tourism Resources; and Fisheries and Wildlife. Administered by Zoology. R: Approval of department.

Scientific writing and oral presentations related to zoo and aquarium studies.

490. Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 7 credits in all enrollments for this course. R: Open only to students in Landscape Architecture. Approval of department.

Individual investigation of landscape architecture topics in the interest areas of the Landscape Architecture faculty.

492. Senior Research Seminar (W)

Spring. 3(2-2) R: Open only to seniors and graduate students in Landscape Architecture. Completion of Tier I writing requirement.

Contemporary issues of relevance to the profession.

493. Internship in Landscape Architecture

Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Seniors in Landscape Architecture or approval of department.

Supervised experience in approved public agencies and professional offices.

494. Special Topics in Landscape Architecture

Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to juniors and seniors in Landscape Architecture. Approval of department.

Selected subjects in landscape architecture derived from emerging issues and topics.

498. Internship in Zoo and Aquarium Science

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Zoology; and Fisheries and Wildlife. Administered by Zoology. R: Open only to juniors or seniors. Approval of department.

Experience in applying zoological experience in a zoo or aquarium setting outside the university.

LARGE ANIMAL CLINICAL SCIENCES LCS

Department of Large Animal Clinical Sciences College of Veterinary Medicine

412. 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 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.

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

611. Research 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: Open only to graduate-professional students in the College of Veterinary Medicine. Approval of department.

Research related to a large animal specialty

612. Problems in Production Medicine

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: LCS 630 or LCS 631; approval of department. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Production medicine problems of livestock health management. Course offered through a consortium with the universities of Illinois, Florida, California, and Nebraska, and Kansas State University, work to be completed at one of those universities.

620. Equine Clinical Clerkship I

Fall, Spring, Summer. 3 credits. A student 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 650.

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

621. Equine Practice Clerkship

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the professional veterinary program. 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. P: LCS 620 or LCS 621. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 654.

Advanced general training in equine medicine and surgery.

623. Equine Musculoskeletal Diseases Clerkship

Fall, Spring, Summer. 3 credits. 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 651.

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

624. Equine Theriogenology Clerkship

Fall, Spring, Summer. 3 credits. R: Open only to graduate-professional students in the College of Veterinary Medicine. Not open to students with credit in LCS 644.

Emphasis on diagnostic methods utilized in equine reproduction.

625. Equine Herd Health Clerkship

Fall, Spring, Summer. 3 credits. P: LCS 621. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in LCS 666.

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: LCS 620 or LCS 621; LCS 622. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in 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

Fall, Spring, Summer. 3 credits. P: LCS 620 or LCS 621; LCS 622. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in 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: LCS 620 or LCS 621; LCS 622, LCS 640. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.

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

Descriptions—Large Animal Clinical Sciences of Courses

629. Equine Fundamentals

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.

Basic clinical skills in equine medicine, surgery and reproduction.

630. Food Animal Medicine and Surgery Clerkship

Fall, Spring, Summer. 3 credits. 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 660.

Disease diagnosis and therapy of food animal species in a hospital setting. Disease process related to herd of origin.

631. Food Animal Practice Clerkship

Fall, Spring, Summer. 3 credits. R: Completion of semester 5 of the professional veterinary program. Not open to students with credit in LCS 660.

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: LCS 630, 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 672.

In depth, supervised food animal medicine and surgery.

633. Dairy Production Medicine Clerkship

Fall, Spring, Summer. 3 credits. P: LCS 631, 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 664.

Dairy farm and herd health management. Record keeping, general management, housing, nutrition. Mastitis control.

634. Swine Production Medicine Clerkship

Fall, Spring, Summer. 3 credits. P: LCS 631, 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 668.

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

635. Advanced Swine Production Medicine

Fall. 3 credits. P: LCS 634. Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.

Preparation for herd consultation: population management records analysis, integrated production systems, and complex multi-factorial problems.

636. Introduction to Herd 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.

Principles of herd health and production medicine. Participation in the production medicine service.

637. Advanced Dairy Production Medicine

Fall, Spring, Summer. 3 credits. P: LCS 633, LCS 636. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.

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

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. A student 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. 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 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.

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 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 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 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 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 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) 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.

360. Postcolonial Literature and Theory
Fall, Spring. 3(3-0) Interdepartmental with English; and Romance Languages. Administered by English. P: Completion of Tier I writing requirement. 3 credits of literature.
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
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.

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. 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.