473. Urban Design Theory

Fall. 3(3-0)

R: Not open to freshmen and sophomores. Concepts and procedures for the organization, design, and development of public and private urban forms and spaces. Focus on American communities. QA: LA 403, LA 471

Professional Practice

Spring 3(2·2)
P: LA 443. R: Open only to seniors and graduate students in Landscape Architecture.

Principles and procedures of professional office practice. Organization and management of offices, personnel, and projects. Ethical and legal issues. QP: LA 346 QA: LA 480

490. Independent Study
Fall, Spring. 3 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. QA: LA 490

490H. Honors in Landscape Architecture

Fall, Spring 3 to 4 credits. A student may earn a maximum of 7 credits in all enrollments for

R: Open only to Honors College seniors. Approval of department.

Supervised individual investigation of Landscape Architecture topics. QA: LA 400H

492. Senior Research Seminar

Spring. 3(2-2)

R: Open only to seniors and graduate students in Landscape Architecture.

Contemporary issues of relevance to the profession. QA: LA 483

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. QA: LA 489

LARGE ANIMAL CLINICAL SCIENCES LCS

Department of Large Animal Clinical Sciences College of Veterinary Medicine

Principles of Production Medicine 412.

Spring. 2(2-0)
R: Open only to juniors and seniors in College of Agriculture and Natural Resources.
Animal health with emphasis on infectious, parasitic

and metabolic disease control and prevention. Principles of production medicine. QA: LCS 412

Problems in Large Animal Clinical 610. 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-professio-nal program in the College of Veterinary Medicine. Advanced clinical training in a problem related to large animal clinical sciences.

Problems in Production Medicine 612.

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

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 Medicine and Surgery Clerkship

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

rotiments 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 preven-

QA: LCS 650

Equine Field Service Clerkship 621.

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all en-

rollments 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.

Diagnosis, treatment, and prevention of common diseases of horses in a field setting.

Advanced Equine Medicine and Surgery Clerkship Fall, Spring, Summer. 3 credits. A stu-

dent may earn a maximum of 6 credits in all enrollments for this course.

P: LCS 620. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in LCS 654. In-depth, supervised equine medicine and surgery. QA: LCS 654

623. Equine Musculoskeletal Diseases Clerkship

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all en-

rollments 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 651.

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

QA: LCS 651

Equine Theriogenology Clerkship Fall, Spring, Summer. 3 credits. A stu-624.

dent 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. Not open to students with credit in LCS 644.

Emphasis on diagnostic methods utilized in equine reproduction. QA: LCS 644

Equine Herd Health Clerkship 625.

Fall, Spring, Summer. 3 credits. A stu-dent may earn a maximum of 6 credits in all en-

rollments for this course. 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, immuniza-tion, and diagnostic medicine and surgery in the field. QA: LCS 666

630. Food Animal Medicine and Surgery 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 660.

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

of origin. QA: LCS 660

Introductory Food Animal Production Medicine 631.

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 veteri-nary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 660.

Management of on-farm environment. Epidemiological approach to problem solving involving total herd medicine. QA: LCS 660

632. Advanced Food Animal Medicine and Surgery Clerkship

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
P: LCS 630, completion of semester 5 of the profession-

al 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 sur-

gery. QA: LCS 672

633. Dairy Production Medicine Clerkship

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

P: LCS 631, completion of semester 5 of the profession-

al veterinary program. R: Open only to graduate pro-fessional 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.

QA: LCS 664

Swine Production Medicine Clerkship

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: LCS 631, completion of semester 5 of the profession-

A: LCS 601, completion of sentester 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. QA: LCS 668

Large Animal Anesthesia Clerkship Fall, Spring, Summer. 3 credits. A stu-640.

dent may earn a maximum of 6 credits in all en-

rollments 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. *QA: LCS 656*

642.Special Problems-Research Clerkship

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 fourth year graduate-professional students in College of Veterinary Medicine. Application required.

Research related to a large animal specialty. Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

644. Theriogenology Clerkship

Spring, Summer. 2 credits.

R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 624. Clinical experience with diagnostic methods used in

large animal reproduction. Temporary approval effective from Fall Semester 1992

through Spring Semester 1996.

QA: LCS 644

650. Equine Medicine and Surgery Clerkship

Fall, Spring, Summer. 6 credits. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 620.

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

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996. QA: LCS 650

651. Equine Musculoskeletal Disease

Fall. 2 credits.

R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 623.

Diagnosis and management of equine musculoskeletal diseases. Hospitalized and field cases.

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 651

654. Advanced Equine Medicine and Surgery Clerkship Spring. 2 credits. P. LCS 650. R: Open only to fourth year graduate-prof-

essional students in College of Veterinary Medicine. Not open to students with credit in LCS 622. In-depth, supervised equine medicine and surgery. Temporary approval effective from Fall Semester 1992 through Spring Semester 1996. QA: LCS 654

Large Animal Anesthesiology Clerkship 656.

Fall, Spring, Summer. 2 credits. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 640.

Concepts and supervised practice in large animal anesthesiology.

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 656

Field Service and Food Animal 660. Clerkship

Fall, Spring, Summer. 6 credits. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 630 or LCS 631. Management of individual and herd animal disease problems. Hospital and on-farm environment. Theriogenology. Herd health management and clinical epidemiology.

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QP: LCS 630 or LCS 631 QA: LCS 660

664. Dairy Herd Health Clerkship
Fall, Spring. 2 credits.
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 633. Dairy farm and herd health management. Record

keeping, general management, housing, nutrition. Mastitis control.

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 664

666. Equine Herd Health Clerkship

Fall, Spring. 2 credits.

R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 625.

Establishing and maintaining herd health programs for equine operations.

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 666

668. Swine Herd Health Clerkship

Fall, Spring. 2 credits.
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 634.

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

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 668

672. Advanced Food Animal Clerkship

Spring. 2 credits.
P: LCS 660. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 632. In depth, supervised food animal surgery and medi-

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996. QA: LCS 672

Preceptorship

Fall, Spring, Summer. 4 credits.
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 677 or VM 610 or VM

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

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

QA: LCS 674

676. Veterinary Nutrition for Livestock Clerkship

P: LCS 660. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Evaluating the nutritional status and rations of live-

Temporary approval effective from Fall Semester 1992 through Spring Semester 1996. QA: LCS 676

Veterinary Preceptorship

Fall, Spring, Summer. 3 credits. A stu-dent may earn a maximum of 6 credits in all enrollments for this course.

R: Completion of semester 5 of the graduate-professio-nal program in the College of Veterinary Medicine. 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. QA: LCS 674

809. 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 to graduate students in Large Animal Clinical Sciences. Approval of department. Elective work in surgical research problems student's interest.

QA: LCS 809

Special Problems in Large Animal 811.

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. QA: LCS 811

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 sur-gery, suture materials and patterns. Tissue handling and wound healing.

827. Comparative Theriogenology
Spring of odd-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 theriogenol-

ogy.

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

Animal health in the tropics. Impact on agriculture, the livestock industry, and human welfare.

Design and Conduct of Epidemiological Studies and Clinical Trials

Spring. 2(2-0) P:VM 533. R: Open only to graduate student. Approval of department.

Applied analytical methods in experimental design. Assessment of health and disease status of animal and human populations. Risk assessment and interpretation of clinical trials.

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.

Investigating the Lung 901.

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 resparatory structure and function in health and disease. Mechanisms of lung injury. QA: LCS 901

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(4-1)

R: No previous experience in Latin or designated score on Latin placement test.

Fundamentals of vocabulary, grammar, and syntax. Translation of elementary readings. QA: LTN 101, LTN 102

Elementary Latin II

Spring. $4(4\overline{}1)$ P: LTN 101 or designated score on Latin placement test.

Continued study of the fundamentals of vocabulary, grammar, and syntax. Translation of elementary

readings. QP: LTN 102 QA: LTN 102, LTN 103