

## SMALL ANIMAL CLINICAL SCIENCES

## SCS

### Department of Small Animal Clinical Sciences College of Veterinary Medicine

- 511 Veterinary Radiology**  
Fall, 1(1-0) R: Open only to graduate-professional students in College of Veterinary Medicine.  
Principles of veterinary radiology, radiation safety, and normal radiologic anatomy.
- 611 Diagnostic Imaging Clerkship**  
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the professional veterinary program.  
Diagnostic radiography and ultrasound imaging. Radiation safety. Special procedures.
- 612 Problems in Diagnostic Imaging Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (SCS 611) and Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Advanced diagnostic radiography, ultrasound imaging, and magnetic resonance imaging.
- 613 Diagnostic Ultrasound Clerkship**  
Fall, Spring. 3 credits. RB: (SCS 611) and Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.  
Principles of ultrasound physics, ultrasound scanning techniques, and interpretation of ultrasound imaging.
- 625 Small Animal General Medicine Clerkship**  
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine.  
Diagnostic and treatment services for routine and emergency outpatients.
- 626 Small Animal Soft Tissue Surgery Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine.  
Diagnosis and preoperative, surgical, and postoperative care of patients requiring routine elective and major soft-tissue surgical procedures.
- 630 Spay/Neuter Clerkship**  
Fall, Spring, Summer. 3 credits. RB: (SCS 626 and SCS 648) and Completion of semester 5 of the graduate professional veterinary program.  
Ovariectomy or orchiectomy. Aspects of pre- and post-operative management and anesthesia.
- 636 Problems in Soft Tissue Surgery Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (SCS 626) and completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Soft tissue surgery problems.
- 637 Operative Surgery: Instruction and Review**  
Fall. 3 credits. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine. Approval of department.  
Participation in the instruction of VM 557 (Operative Surgery), with preparation for the laboratory and discussion after the laboratory. Performance of additional surgical procedures, case discussions, rounds, and anatomy review. Approved independent study project required.
- 640 Cardiology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine.  
Diagnosis and medical, and surgical treatment of small animal thoracic and cardiovascular disorders.
- 641 Comparative Ophthalmology Clerkship**  
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine.  
Ophthalmic evaluation of all species. Diagnosis and medical and surgical treatment of ophthalmic disease.
- 642 Zoo and Wildlife Clerkship**  
Fall, Spring, Summer. 3 credits. RB: Completion of semester 5 of the professional veterinary program. R: Open to veterinary medicine students in the College of Veterinary Medicine.  
Zoo animal and wildlife medicine and surgery.
- 643 Neurology Clerkship**  
Fall, Spring, Summer. 3 credits. RB: 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 SCS 666.  
Diagnosis and medical and surgical treatment of small animal neurological disorders.
- 644 Dermatology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine.  
Diagnosis and treatment of small animal dermatological disorders.
- 645 Intensive Care Unit Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: 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 SCS 622.  
Intensive care and management of critically ill small animals.
- 646 Small Animal Orthopedic Surgery Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.  
Diagnosis and preoperative, surgical, and postoperative care of patients requiring routine and major orthopedic surgical procedures.
- 647 Small Animal Internal Medicine Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.  
Diagnosis and therapy for complicated medical cases of small animals.
- 648 Anesthesia Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program.  
Pre-anesthesia evaluation, induction, monitoring, and recovery of small animal patients requiring routine and major surgical procedure.
- 650 Advanced Cardiology Clerkship**  
Spring. 3 credits. RB: (SCS 640) and Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Advanced cardiology practice.
- 651 Advanced Comparative Ophthalmology Clerkship**  
Spring. 3 credits. RB: (SCS 641) and Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. R: Approval of department.  
Problem-oriented approach to complex ocular disease processes at the gross and microscopic levels.
- 653 Problems in Neurology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (SCS 643) and and completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Neurologic problems.

## Small Animal Clinical Sciences—SCS

- 654 Clinical Medical Oncology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of Semester 5 of the graduate professional program in the College of Veterinary Medicine. R: Open to graduate-professional students in the College of Veterinary Medicine.  
Management of veterinary cancer patients, including diagnosis, staging evaluation, prognostication and multimodality therapy. Daily clinical rounds and didactic topics.
- 655 Clinical Surgical Oncology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of Semester 5 of the graduate professional program in the College of Veterinary Medicine. R: Open to graduate-professional students in the College of Veterinary Medicine.  
Surgical management of veterinary cancer patients, including diagnosis, staging evaluation, surgical techniques, and perioperative prognosis.
- 670 Clinical Nutrition for Small Animals**  
Spring. 3 credits. RB: Completion of Semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Principles of clinical nutrition and dietetics for dogs and cats: diet evaluation, nutritional assessment, critical care nutrition support, and clinical case evaluations.
- 690 Veterinary Molecular Biology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Concepts and techniques of veterinary molecular biology.
- 693 Problems in Small Animal Clinical Sciences Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. R: Open to veterinary medicine students.  
Special problems.
- 694 Small Animal Specialty Practice Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open to veterinary medicine students in the College of Veterinary Medicine.  
Supervised, off-campus, specialty practice experience in an assigned veterinary practice or other school of veterinary medicine.
- 695 Emergency and Critical Care Medicine Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in the College of Veterinary Medicine.  
Admission, triage, diagnosis, treatment, and discharge of patients entering an emergency service. Daily instructional rounds.
- 808 Problems in Small Animal Surgery**  
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 15 credits in all enrollments for this course. R: Open only to graduate students in the Department of Small Animal Clinical Sciences.  
Problems in small animal surgery.
- 813 Small Animal 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 the Department of Small Animal Clinical Sciences.  
Small animal seminar.
- 823 Wildlife Disease Ecology and Management**  
Summer of even years. 3(2-3) Interdepartmental with Fisheries and Wildlife and Large Animal Clinical Sciences. Administered by Fisheries and Wildlife. RB: (FW 423) or previous course work in vertebrate ecology, epidemiology or animal disease management. R: Open only to graduate students in the College of Agriculture and Natural Resources or the College of Natural Science or the College of Veterinary Medicine.  
Ecological and epidemiological principles of wildlife disease investigation and management.
- 830 Comparative Systems Review in Oncologic Medicine - Supradiaphragmatic**  
Fall. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Literature review of supradiaphragmatic oncologic diseases organized by organ system. Comparative aspects of the specific malignancies in human and veterinary oncology.
- 831 Comparative Systems Review in Oncologic Medicine - Subdiaphragmatic**  
Spring. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Literature review of subdiaphragmatic oncologic diseases organized by organ system. Comparative aspects of the specific malignancies in human and veterinary oncology.
- 832 Comparative Cancer Biology**  
Spring. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Concepts in cancer biology. Comparative medicine.
- 833 Pharmacology of Anticancer Chemotherapeutics**  
Fall. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Literature review and discussion of drugs and other agents used in the treatment of neoplastic diseases in humans and companion animals.
- 834 Principles of Cancer Protocol Design**  
Fall. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Principles of the design and evaluation of clinical trials in oncology.
- 835 Comparative Aspects of Tumor Immunology**  
Spring. 2(2-0) RB: Completion of year 2 of the graduate professional program in the College of Veterinary Medicine.  
Understanding the immune system's response to neoplastic cells and how the immune response may be recruited to fight cancer. Comparative aspects of immunology.
- 899 Master's Thesis Research**  
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to graduate students in the Department of Small Animal Clinical Sciences.  
Master's thesis research.