

**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. A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Completion of 5 semesters of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in SCS 623. Diagnostic radiography and ultra sound imaging. Radiation safety. Special procedures.  
QA: SCS 623

**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.  
P: SCS 611. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Advanced diagnostic radiography, ultrasound imaging, and magnetic resonance imaging.

**621. Anesthesiology Clerkship**

Fall, Spring, Summer. 3 credits.  
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in SCS 648. Supervised anesthesiology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 621

**622. General Medicine and Intensive Care Unit Clerkship**

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 SCS 625 or SCS 645. Diagnostic and therapeutic plans and procedures for pet animal patients presented by appointment and as emergencies.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 622

**623. Radiology Clerkship**

Fall, Spring, Summer. 3 credits.  
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in SCS 611. Supervised radiology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 623

**624. Small Animal Surgery Clerkship**

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 SCS 626 or SCS 646. Soft tissue and orthopedic surgery in companion animals.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 624

**625. Small Animal General Medicine 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 SCS 622. Diagnostic and treatment services for routine and emergency outpatients.  
QA: SCS 622

**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.  
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 SCS 624. Diagnosis and preoperative, surgical, and postoperative care of patients requiring routine elective and major soft tissue surgical procedures.  
QA: SCS 624

**627. Veterinary Molecular Biology Clerkship**

Fall, Spring, Summer. 2 credits. A student may earn a maximum of 4 credits in all enrollments for this course.  
R: Completion of three years of the graduate-professional program in the College of Veterinary Medicine. Concepts and techniques of veterinary molecular biology.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.

**631. Problems in Small Animal Anesthesiology Clerkship**

Fall, Spring, Summer. 2 credits.  
P: SCS 621. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Anesthesiology problems.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 631

**634. Problems in Soft Tissue Surgery Clerkship**

Fall, Spring, Summer. 2 credits.  
P: SCS 624. R: Open only to graduate-professional students in College of Veterinary Medicine. Soft tissue surgery problems.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 634

**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.  
P: SCS 626. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Soft tissue surgery problems.

**640. Cardiology 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 SCS 660. Diagnosis and medical, and surgical treatment of small animal thoracic and cardiovascular disorders.  
QA: SCS 660

**641. Ophthalmology 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 SCS 663. Ophthalmic evaluation of all species. Diagnosis and medical and surgical treatment of ophthalmic disease.  
QA: SCS 663

**642. Zoo and Wildlife 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 SCS 665. Zoo animal and wildlife medicine and surgery.  
QA: SCS 665

**643. Neurology 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 SCS 666. Diagnosis and medical and surgical treatment of small animal neurological disorders.  
QA: SCS 666

**644. Dermatology 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 SCS 681. Diagnosis and treatment of small animal dermatological disorders.  
QA: SCS 681

**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.  
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 SCS 622. Intensive care and management of critically ill small animals.  
QA: SCS 622

**646. Small Animal Orthopedic 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 SCS 624. Diagnosis and preoperative, surgical, and postoperative care of patients requiring routine and major orthopedic surgical procedures.  
QA: SCS 624

**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.  
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 SCS 661. Diagnosis and therapy for complicated medicine cases of small animals.  
QA: SCS 661

**648. 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 5 semesters of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in SCS 621. Pre-anesthesia evaluation, induction, monitoring, and recovery of large and small animal patients requiring routine and major surgical procedure.  
QA: SCS 621

**650. Advanced Cardiology**

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: SCS 640 R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Advanced cardiology practice.

**651. Problems in Ophthalmology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: SCS 641. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Ophthalmic problems.

**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.  
P: SCS 643. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Neurologic problems.

**656. Problems in Orthopedic Surgery Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: SCS 646. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Orthopedic surgery problems.  
QA: SCS 674

**657. Problems in Internal Medicine Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: SCS 647. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Internal medicine problems.  
QA: SCS 671

**658. Problems in Anesthesiology Clerkship**  
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: SCS 648. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Advanced practice of anesthesiology in the teaching hospital setting.

**660. Cardiology Clerkship**  
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 SCS 640.  
Cardiology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 660

**661. Internal Medicine Clerkship**  
Fall, Spring, Summer. 3 credits.  
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in SCS 647.  
Supervised internal medicine practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 661

**663. Ophthalmology Clerkship**  
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 SCS 641.  
Ophthalmology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 663

**665. Zoo and Wildlife 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 SCS 642.  
Zoo animal and wildlife medicine and surgery.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 665

**666. Neurology Clerkship**  
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 SCS 643.  
Neurology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 666

**671. Problems in Internal Medicine Clerkship**  
Fall, Spring, Summer. 2 credits.  
P: SCS 661. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine.  
Internal medicine problems.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 671

**673. Problems in Ophthalmology Clerkship**  
Spring. 2 credits.  
P: SCS 663. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine.  
Ophthalmology problems.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 673

**674. Problems in Orthopedic Surgery Clerkship**  
Fall, Spring, Summer. 2 credits.  
P: SCS 624. R: Open only to fourth year graduate-professional students in College of Veterinary Medicine.  
Orthopedic surgery problems.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 674

**680. Special Problems 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. Approval of department.  
Clinical training with problem cases.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 680

**681. Dermatology Clerkship**  
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 SCS 644.  
Dermatology practice.  
Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: SCS 681

**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.  
R: 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 6 credits in all enrollments for this course.  
R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.  
Special problems.  
QA: SCS 680

**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 Small Animal Clinical Sciences.  
QA: SCS 808

**810. Problems in Small Animal Medicine**  
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 Small Animal Clinical Sciences.  
QA: SCS 810

**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 Small Animal Clinical Sciences.  
QA: SCS 813

**826. Cardiology**  
Fall of even-numbered years. 3(3-0)  
R: Open only to graduate students in Small Animal Clinical Sciences.  
Advances in veterinary cardiology. Congenital and acquired diseases. Electrocardiology, cardiac catheterization, and surgery.  
QA: SCS 826

**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 Small Animal Clinical Sciences.

## SOCIAL SCIENCE SSC

### College of Social Science

**493. Social Science Internship**  
Fall, Spring, Summer. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to juniors and seniors in College of Social Science. Approval of college.  
Methods and concepts from social and behavioral sciences applied in career-related settings.  
QA: SSC 498

**496. Field Study Abroad**  
Fall, Spring, Summer. 3 to 10 credits. A student may earn a maximum of 16 credits in all enrollments for this course.  
R: Open only to juniors and seniors. Approval of college.  
Study abroad under MSU faculty supervision. Social behavior and processes in selected countries.  
QA: SSC 495

**999. Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 36 credits in all enrollments for this course.  
QA: SSC 999

## SOCIAL WORK SW

### School of Social Work College of Social Science

**200. Introduction to Social Work**  
Fall, Spring. 3(3-0)  
Social work practice, ethics, and values, in the context of social welfare policy in the United States.  
QA: SW 205

**310. Human Behavior and Social Environment**  
Fall. 3(3-0)  
P: SW 200, PSY 101, SOC 100, PSY 236; BS 110 or ZOL 341 or TCC 325 or PSL 250. R: Open only to majors in Social Work.  
General systems and ecological theories within the context of lifespan development as applied to social work.  
QP: SW 205, PSY 160, PSY 170, SOC 241, PSY 225, BS 210, BS 211 QA: SW 438