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# SURGICAL SCIENCES (SURG SCI)

## **SURG SCI 501 – RADIOGRAPHIC ANATOMY OF THE DOG AND CAT** 1 credit.

Normal radiographic anatomy of the dog and cat. This will include soft tissue structures as well as the skeletal system. Clinical case material to emphasize the need for a thorough knowledge of normal radiographic anatomy.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** Yes, unlimited number of completions **Last Taught:** Fall 2023

#### **SURG SCI 542 – VETERINARY OPHTHALMOLOGY**

2 credits

Provides basic instruction in the application of ophthalmic diagnostics and therapeutics to small and large domestic animals. Acquire skills and knowledge to accurately diagnose, treat, prognose or refer domestic animals with common ophthalmic disorders.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No **Last Taught:** Spring 2024

#### **SURG SCI 543 – FUNDAMENTALS OF ANESTHESIOLOGY I**

1 credit.

Covers basic principles of sedation, pain physiology, anesthetic drugs, anesthetic monitoring, and the practical considerations in performing anesthesia on healthy veterinary species. Case-based and interactive where appropriate.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No **Last Taught:** Spring 2024

#### **SURG SCI 544 – SURGERY FUNDAMENTALS**

2 credits.

Introductory material on the scientific foundations of surgery. Preparation for clinical work in veterinary surgery and medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing.

Repeatable for Credit: No Last Taught: Spring 2024

## SURG SCI 545 – FUNDAMENTALS OF ANESTHESIOLOGY II

1 credit.

Focus on anesthetic management of common veterinary species with concurrent medical disease. Covers advanced pain management principles and techniques, anesthesia for exotic animal species, and breed considerations in anesthesia. Case-based and interactive where appropriate.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year

standing

**Repeatable for Credit:** No **Last Taught:** Spring 2024

#### SURG SCI/F&W ECOL 548 - DISEASES OF WILDLIFE

3 credits.

Provides an overview of the issues involved across a wide range of wildlife diseases, presented within the context of ecosystem health or "one health". Content will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. Covers a wide variety of wildlife diseases caused by bacteria, viruses, parasites, prions, and environmental contaminants. Consequences associated with environmental changes on the manifestation of wildlife diseases will also be discussed. This range of diseases will be presented in order to familiarize the many facets involved in disease management, from animal and human health issues, to ecological and environmental considerations, to the role of society in contributing to, and managing, these diseases.

**Requisites:** BOTANY/BIOLOGY 130, (ZOOLOGY/BIOLOGY 101 102), BIOLOGY/BOTANY/ZOOLOGY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci reg

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No Last Taught: Fall 2023

#### **SURG SCI 630 – SMALL ANIMAL SURGERY**

4 credits.

The pathophysiology and diagnosis of common general, orthopedic, and neurologic surgical diseases of small animals are presented. The operative management and postoperative care of small animal surgical patients are discussed in detail.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

Repeatable for Credit: No Last Taught: Fall 2023

## SURG SCI 631 – LARGE ANIMAL SURGERY: ORTHOPEDIC AND SOFT TISSUE

3 credits.

Examination techniques, diagnostic aids and surgical procedures relevant to the gastrointestinal, integumentory, musculoskeletal, respiratory and genitourinary systems of the equine and food animal species.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

Repeatable for Credit: No Last Taught: Spring 2024

#### SURG SCI 632 - SMALL ANIMAL SURGERY LABORATORY

2 credits.

Basic skills necessary for participation in the surgical management of small animals in the Veterinary Medical Teaching Hospital.

Requisites: Declared in Doctor of Veterinary Medicine with third year

Repeatable for Credit: No Last Taught: Spring 2024

#### **SURG SCI 634 – SMALL ANIMAL ANESTHESIA LABORATORY**

1 credit.

Apply principles and techniques of veterinary anesthesiology to common companion animals.

Requisites: Declared in Doctor of Veterinary Medicine with third year standing

Repeatable for Credit: No Last Taught: Spring 2024

#### **SURG SCI 638 – VETERINARY DIAGNOSTIC IMAGING**

2 credits.

Veterinary radiology principles, physical background and diagnostic techniques will be taught and emphasized in laboratory exercises.

Requisites: Declared in Doctor of Veterinary Medicine with third year standing

Repeatable for Credit: No

Last Taught: Fall 2023

#### SURG SCI 642 - LARGE ANIMAL SURGERY: CLINICAL ROTATION

2 credits.

Learn the admission, examination, preoperative management, surgical procedures and postoperative management of large animals presented to the Veterinary Medical Teaching Hospital. Hands-on experience in the Large Animal Surgery Service.

Requisites: Declared in Doctor of Veterinary Medicine with fourth year standing

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2024

#### SURG SCI 644 - CLINICS-SMALL ANIMAL ORTHOPEDIC **SURGERY**

2 credits.

Rotation through orthopedic and neurosurgical clinics and surgery. Requisites: Declared in Doctor of Veterinary Medicine with fourth year standing

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2024

#### SURG SCI 645 - SENIOR ROTATION IN SMALL ANIMAL GENERAL **SURGERY**

2 credits.

Hands-on diagnosis and treatment of general surgical diseases of small animal species.

Requisites: Declared in Doctor of Veterinary Medicine with fourth year standing

Repeatable for Credit: Yes, unlimited number of completions Last Taught: Spring 2024

#### SURG SCI 646 - VETERINARY ANESTHESIOLOGY-CLINICAL **ROTATION**

2 credits.

Clinical anesthesia and pain management techniques including preanesthetic evaluation, induction procedures, intraoperative anesthetic and analgesic care and recovery management of small, large and exotic animal species. Critical patient care, novel anesthetic and analgesic techniques and cardiopulmonary resuscitation.

Requisites: Declared in Doctor of Veterinary Medicine with fourth year

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

#### **SURG SCI 647 - RADIOLOGY CLINICS**

2 credits.

Clinical clerkship in the Veterinary Medical Teaching Hospital. Provides exercises in technical and interpretive diagnostic radiology.

Requisites: Declared in Doctor of Veterinary Medicine with fourth year

Repeatable for Credit: No Last Taught: Spring 2024

#### **SURG SCI 675 - SPECIAL TOPICS**

1-5 credits.

Topics vary.

Requisites: Declared in Doctor of Veterinary Medicine Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

#### **SURG SCI 676 - SPECIAL SPECIES HEALTH**

2 credits

Basic principles of the clinical management of exotic pet species, with an emphasis on small mammals (rabbits, rodents, etc), birds and reptiles commonly kept as companion animals.

Requisites: Declared in Doctor of Veterinary Medicine with third year standina

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

#### **SURG SCI 677 – VETERINARY DENTISTRY ELECTIVE**

1 credit.

Introduction to veterinary dentistry principles and practice.

Requisites: Declared in Doctor of Veterinary Medicine with third year standing

Repeatable for Credit: No Last Taught: Spring 2024

#### **SURG SCI 699 - DIRECTED STUDY**

1-5 credits.

Projects in the laboratory and/or through library work in specific subject area under the direct guidance of a faculty member.

Requisites: Consent of instructor Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

## SURG SCI 710 – SPECIAL SPECIES CLINICAL ROTATION

2 credits.

Develop clinical proficiency in the basic veterinary care of common exotic pet species routinely seen in general veterinary practice. Learn how to obtain comprehensive medical histories, how to safely restrain, obtain samples and administer drugs in a variety of common exotic pet species. Develop a solid understanding on how to manage common disorders seen in small exotic mammals, pet birds and pet reptiles.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions **Last Taught:** Spring 2024

# **SURG SCI 711 – WILDLIFE REHABILITATION MEDICINE ROTATION** 2 credits.

Rotation is a partnership between the UW Vet School, Dane County Humane Society's Wildlife Center and the Wisconsin Humane Societies' (WHS) Wildlife Center in Milwaukee. Develop clinical proficiency in wildlife rehabilitation. Work closely with licensed wildlife rehabilitators at wildlife centers to learn more about native wildlife in rehabilitation settings. Participate in veterinary patient rounds, which are led by UW veterinarians at wildlife centers. Cadaver laboratories, topic presentations and radiograph and blood smear reviews will complement the patient-based learning.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions **Last Taught:** Spring 2024

## **SURG SCI 712 – ZOOLOGICAL MEDICINE CLINICAL ROTATION** 2 credits.

Practice medical management of zoological species kept in small- to medium-sized zoological facilities and wildlife rehabilitation cases, in collaboration with local facilities, such as Henry Vilas Zoo, Ochsner Park Zoo, and the Dane County Humane Society's Wildlife Center. Prepare for clinical cases, provide on-site medical evaluations, and complete medical records.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, for 2 number of completions

Last Taught: Spring 2023

## SURG SCI 714 – SMALL ANIMAL RADIATION ONCOLOGY ROTATION

1-2 credits.

Apply clinical veterinary medicine in a small animal oncology setting that focuses on radiotherapy. Work alongside veterinarians and veterinary technicians with expertise in veterinary oncology. Participate in case management and client communication. Expand general knowledge about cancer in dogs and cats, including diagnosis and treatment. Learn about the role of radiotherapy in the treatment of cancer. Understand the patient experience during cancer treatment, specifically related to radiation. Learn about alternative treatment options when radiotherapy is not feasible. Practice clinical skills including physical examination, venipuncture, fine needle aspiration, tissue biopsy, image interpretation, and record keeping. **Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions **Last Taught:** Spring 2024

#### **SURG SCI 741 – CLINICAL OPHTHALMOLOGY ROTATION**

2 credits.

Provides experience in ocular examination, problem solving skills, and formulation of diagnostic and therapeutic plans for animals presenting with eye disease. Ocular examination as part of the complete physical examination and ocular manifestations of systemic diseases are emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions **Last Taught:** Spring 2024

# SURG SCI 743 – ADVANCED ANESTHESIOLOGY/CRITICAL CARE MEDICINE

2 credits.

Provides advanced, in-depth training in the areas of small, large and exotic animal anesthesia and pain management.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No Last Taught: Spring 2024

## SURG SCI 744 – RESTRAINT AND ANESTHESIA OF EXOTIC ANIMALS

2 credits.

Provides advanced, directed anesthetic and restraint techniques for multiple exotic animal species such as rodents, rabbits, amphibians, reptiles, primates, fish and birds. The unique pharmacology and physiology of each species will be emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No **Last Taught:** Summer 2023

#### SURG SCI 746 - FOOD ANIMAL SURGERY

2 credits.

Provides didactic and surgical experience in the major, common surgical diseases of cattle and pigs.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

Course Designation: Grad 50% - Counts toward 50% graduate

coursework requirement Repeatable for Credit: No Last Taught: Spring 2024

#### **SURG SCI 748 – DENTISTRY AND ORAL SURGERY ROTATION**

1-3 credits.

Dentistry, oral medicine and surgery as well as comprehensive patient care through the use of progressive methods, hospital resources and interdisciplinary specialists.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

#### **SURG SCI 750 – SMALL ANIMAL ULTRASOUND ELECTIVE**

1 credit.

Introduction to hands-on ultrasound imaging and expand on selected portions of ultrasound physics, literature and problem-based case studies. **Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

### **SURG SCI 775 – EXTERNSHIP**

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2024

#### **SURG SCI 812 – RESEARCH ETHICS AND CAREER DEVELOPMENT**

2 credits.

Provides instruction in principles and concepts of research ethics through presentations and discussion of case studies. Topics pertinent to development of a successful career in research are also included.

Requisites: Graduate/professional standing

 $\textbf{Course Designation:} \ \mathsf{Grad}\ \mathsf{50\%}\ \mathsf{-}\ \mathsf{Counts}\ \mathsf{toward}\ \mathsf{50\%}\ \mathsf{graduate}$ 

coursework requirement Repeatable for Credit: No Last Taught: Fall 2023