

# Veterinary Medicine - VMED

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## Courses

**VMED 9000 ORIENTATION TO VETERINARY MEDICINE (0)** SEM. 1. SU. Overview of organized veterinary medicine, history of the profession, professional responsibilities and privileges, and career opportunities within the profession.

**VMED 9009 PROFESSIONAL SELF CARE SKILLS (1)** LEC. 1. SU. Departmental approval. This course will discuss the factors present within veterinary medicine that put us at risk for empathetic exhaustion, burnout, suicidal ideation and other issues, followed by sharing skills, thoughts and actions that will facilitate resiliency, well-being and fulfillment within the profession.

**VMED 9010 VETERINARY JURISPRUDENCE (1)** LEC. 1. Provide a foundation in veterinary medical ethics and legal issues associated with veterinary medicine.

**VMED 9020 PROFESSIONAL COMMUNICATION SKILLS FOR VETERINARY MEDICINE (1)** LEC. 1. LAB. 2. SU. Students will develop skills in communication with faculty, staff, colleagues, pet-owners, and the public sector through lecture and interactive laboratory sessions. These skills will be immediately implementable into everyday student/educational life, clinical practice, and team building settings. Topics include implementation of nonverbal and verbal communication skills during financial discussion, de-escalation, grief and empathy, creating safe spaces for collaborative decision making, and discussing medical errors.

**VMED 9030 NATURAL HISTORY AND ANATOMY OF MARINE MAMMALS AND SEA TURTLES (1)** LEC. 1, LAB. 0-2. SU. The course will be divided into nine hours of lectures and six hours of labs evenly divided between odontocetes (toothed whales), Pinnipeds (seals, sea lions and walruses) and sea turtles. Lecture topics will include natural history and anatomy of each group. Three fresh tissue wet labs will include dissections of one dolphin (Bottlenose or Spotted), one California Sea Lion and one sea turtle (one of several species found in the northern Gulf of Mexico).

**VMED 9040 MARINE MAMMAL STRANDING RESPONSE AND NECROPSY TECHNIQUES (1)** LEC. 1, LAB. 0-3. SU. Departmental approval. This course will provide an overview of the stranding response and necropsy techniques for small cetacean, manatees, and pinnipeds (manatee necropsy based on availability). The course will include lectures and necropsies at Dauphin Island Sea Lab.

**VMED 9050 PROFESSIONAL DEVELOPMENT AND BUSINESS FUNDAMENTALS (1)** LEC. 15. Auburn University CVM Professional Development and Business Fundamentals course is a 1 credit-hour course encompassing the study, understanding and application of pertinent business disciplines guiding the decision-making responsibilities of practice owners, veterinarians, veterinary students, veterinary technicians and practice managers that seek to improve profitability and efficiency allowing for a competitive advantage and long term success in their personal and professional careers.

**VMED 9060 ELEVATING YOUR IMPACT: TOOLS FOR COMMUNITY-CENTERED MEDICINE (1)** LEC. 12. LAB. 1. SU. This experience will provide students with an introduction to a wide range of animal welfare topics in a hands-on interactive environment. Subject matter experts will present, lead discussions, and facilitate student activities throughout this 2-day intensive weekend elective. Students will have the opportunity to practice spay/neuter techniques using easily buildable string models, become the crime scene investigator on animal cruelty cases, and learn countless other skills that will help them become better advocates for the animals and pet owners in their communities regardless of the specific veterinary field they choose to enter post-graduation.

**VMED 9070 APPLIED CLINICAL PATHOLOGY (1)** LEC. 1. SU. This course covers the use and interpretation of hematologic, clinical biochemical, coagulation, urinalysis and cytologic laboratory data in the diagnosis of diseases and pathophysiologic processes, building on the foundation established in the first two years of the professional DVM curriculum. The data discussed in this course are taken from clinical cases from the AU teaching hospitals.

**VMED 9080 VETERINARY PAIN MANAGEMENT (1)** LEC. 1. SU. The veterinary pain management course will serve to increase a student's knowledge base on many aspects of pain management of the veterinary patient. Subjects covered in this course will include in depth review of neuroanatomy and physiology of pain, pathophysiology of pain, pharmacology of medications used for pain management, non-pharmacologic treatments for pain, and specific pain management strategies for various domestic species, and exotic and zoo animals. Content in this class will be delivered through lecture or other formats depending on the presenting faculty. Departmental approval required.

**VMED 9090 CANINE AND FELINE DENTISTRY (1)** LEC. 1. SU. This elective is designed to build upon Small Animal Dentistry knowledge and teach entry level abilities to help 2nd and 3rd year veterinary students become clinic and practice ready. Departmental approval required.

**VMED 9100 PROFESSIONAL PREPAREDNESS (1)** LEC. 1. SU. Departmental approval. This course will introduce principles of preparedness for the major challenges students will face both now and after graduation from veterinary school (student loans, home mortgage, vehicle purchase, retirement plan, etc.).

**VMED 9110 PHYSIOLOGY I (5)** LEC. 5. LAB. 1. Cellular, Cardiovascular, Renal, and Respiratory Physiology.

**VMED 9111 VETERINARY ANATOMY I (SMALL ANIMAL) (4)** LEC. 2. LAB. 2. Basic concepts of body structure and small animal gross anatomy with veterinary medical applications. Credit will not be given for both VMED 5111 and VBMS 6111.

**VMED 9120 PHYSIOLOGY II (4)** LEC. 5. Gastrointestinal Physiology, Metabolism, Endocrinology, and Reproductive Physiology.

**VMED 9121 VETERINARY ANATOMY II (3)** LEC. 1. LAB. 2. In-depth study of the gross anatomy of the ox, horse, and minor species with inclusion of clinical relevance.

**VMED 9130 GENETIC AND CELLULAR BASIS OF ANIMAL DISEASE (1)** LEC. 3. One credit course focused on the relationship between genetics and animal diseases.

**VMED 9131 BASIC MICROANATOMY/DOMESTICS ANIMALS (3)** LEC. 1. LAB. 2. Functional comparative microstructure of cells, basic tissues, cardiovascular system, urinary system, skeleton and osteogenesis, respiratory system, and blood of domestic animals.

**VMED 9140 ADVANCED ANESTHESIA AND PAIN MANAGEMENT (1)** LEC. 1. SU. This course is intended to expand on the basic topics covered in the veterinary curriculum. The content will be selected by the participants on the first day and a syllabus generated based on a consensus of topics the group would like to discuss. All topics in the realm of anesthesia and pain management are within the scope of possibilities. This course is not designed to be a review of topics already covered in other classes, but to expand on those topics. Departmental approval required.

**VMED 9141 ORGANOLGY OF DOMESTIC ANIMALS (2)** LEC. 1. LAB. 2. Comparative microstructure of the digestive system, lymphoid system, endocrine system, integumentary system, reproductive system, and placentation of domestic animals.

**VMED 9150 DIAGNOSTIC IMAGING (2)** LEC. 2. LAB. 1. Basic radiographic and ultrasonographic physics; introduction to computed tomography, magnetic resonance imaging, and nuclear imaging.

**VMED 9151 VETERINARY NEUROSCIENCES (4)** LEC. 3. LAB. 1. Gross and microscopic morphology and physiology of the peripheral and central nervous systems. Course may be repeated for a maximum of 12 credit hours.

**VMED 9160 VETERINARY PUBLIC HEALTH (3)** LEC. 3. This first half of this class will include instruction on the zoonoses, and the principles of epidemiology or population medicine. For the zoonoses primary mechanisms of transmission and inclusion in differential diagnosis lists will be emphasized. The role of the veterinarian in prevention of human disease from the zoonoses will be stressed. Epidemiologic methods for investigation of disease distribution and dynamics in populations also will be covered. The second half of the course will provide a broad One Health/ Public Health overview of food safety and food security issues, including pet food and animal feeds. Basic concepts and principles will be illustrated and reinforced through the study of food- and water-borne diseases. This part of the course will address food and water-borne pathogens, their public health impacts (historic and present-day), prevention and mitigation measures (sanitary production and processing, pasteurization, and preservation techniques). The history and importance of regulatory controls and oversight in order to assure food and feed safety, consumer confidence, sustainability, and stable markets for American agriculture will be discussed.

**VMED 9170 PROFESSIONAL COMMUNICATION SKILLS (1)** LEC. 1. SU. Departmental approval. Students will develop skills in communication with colleagues, clients and staff through lecture and interactive laboratory sessions. Students will also improve their ability to give and receive feedback from peers. Professional presentation skills will be developed during the course with a final presentation given in laboratory setting.

**VMED 9180 VETERINARY ETHOLOGY (2)** LEC. 2. Basic concepts of ethology and other approaches to animal behavior, introduce diagnostic and treatment methods, discuss relevant cases. Course may be repeated for a maximum of 6 credit hours.

**VMED 9190 INTRODUCTION TO VETERINARY PHARMACOLOGY (1)** LEC. 3. An organized foundation of information to develop clinical thinking skills in veterinary pharmacology. Course may be repeated for a maximum of 16 credit hours.

**VMED 9200 VETERINARY PARASITOLOGY I (3)** LEC. 3. LAB. 1. Platyhelminthes, trematodes, and nematodes of domestic animals.

**VMED 9210 VETERINARY PARASITOLOGY II (2)** LEC. 3. LAB. 1. Arthropods, protozoa, helminths, and acanthocephalans of domestic animals. Parasiticides.

**VMED 9220 PRINCIPLES OF VETERINARY PATHOLOGY (3)** LEC. 4. LAB. 1. General principles of pathology and mechanisms of disease processes affecting animals.

**VMED 9230 VETERINARY CLINICAL PATHOLOGY (3)** LEC. 47. LAB. 8. Laboratory test principles and results interpretations in evaluation of hematopoietic, coagulation, hepatic, renal, gastrointestinal, acid/base and fluid status of animals.

**VMED 9240 PRINCIPLES OF VETERINARY IMMUNOLOGY (3)** LEC. 2. LAB. 1. Principles underlying the immune system's ability to protect animals from disease and mechanisms by which immune responses contribute to disease.

**VMED 9250 VIROLOGY & PRIONS (2)** LEC. 2. LAB. 1. Principles of infectious agents and their pathogenic attributes, infectious diseases of animals, and mechanisms of antimicrobial agents. Course may be repeated for a maximum of 6 credit hours.

**VMED 9260 VETERINARY PHARMACOLOGY (3)** LEC. 5. LAB. 1. Overview of drugs relevant to veterinary practice; pharmacodynamics, pharmacokinetics, clinical application.

**VMED 9270 INTRODUCTION TO CYTOLOGY (1)** LEC. 1. LAB. 1. The principles and practice of evaluation of blood films, cytologic preparations, and urine sediments from various veterinary species.

**VMED 9280 BACTERIOLOGY & MYCOLOGY (3)** LEC. 3. LAB. 1. Veterinary bacterial and fungal pathogens, diseases caused by each, prevention, treatment and presumptive laboratory diagnoses. Course may be repeated for a maximum of 9 credit hours.

**VMED 9290 CLINICAL ANATOMY AND INTRO TO AQUATIC ANIMAL MEDICINE (1)** DSL/LLB. SU. This course delves into the unique anatomic and physiologic features of aquatic animals and serves as an introduction into topics including aquaculture, aquatic toxicology, aquatic research models, diseases of fish, and aquatic medicine. In addition, basic fish anatomy and diagnostic techniques will be taught in laboratory sessions.

**VMED 9300 REPTILE ANATOMY AND MEDICINE (1)** LEC. 1. LAB. 1, LLB. 0. SU. This course will be divided evenly between anatomy and natural history of reptiles. There will be 15 one-hour lectures and 2 two-hour wet labs.

**VMED 9301 PHYSICAL DIAGNOSES OF LARGE AND SMALL ANIMALS (2)** LEC. 2. LAB. 1. Basic approach to physical examination of large and small animals.

**VMED 9309 AVIAN ANATOMY AND MEDICINE (1)** LLB. SU. This course will be divided between the anatomy and natural history of birds. There will be 15 one-hour lectures and 2 two-hour wet labs.

**VMED 9310 INTRODUCTION TO SURGERY (2)** LEC. 2. LAB. 2. Current standing in the DVM professional curriculum and completion of the first 3 semesters of the professional program. Introduction to the fundamental principles and techniques of veterinary surgery.

**VMED 9311 SURGICAL PRACTICUM (0-1)** LAB. 5. SU. Aseptic technique, instrument handling, suture patterns, surgical ties, anesthetic administration/monitoring, surgical incision/tissue handling, wound closure, postoperative patient management. Course may be repeated for a maximum of 1 credit hours.

**VMED 9320 LARGE ANIMAL NUTRITION (2)** LEC. 2. LAB. 0. Proper nutrition for health and disease prevention and treatment in large animals in different stages of life. May count either VMED 5320 or VMED 5420. Course may be repeated for a maximum of 6 credit hours.

**VMED 9330 EXOTIC COMPANION ANIMAL MEDICINE (2)** LEC. 4. Care, diagnosis, and treatment of exotic companion animals. May count either VMED 5330 or VMED 5430. Course may be repeated for a maximum of 6 credit hours.

**VMED 9340 EMERGENCY MEDICINE AND CRITICAL CARE (2)** LEC. 5. Emergency presentations, critical care management.

**VMED 9350 VETERINARY TOXICOLOGY (2)** LEC. 2. LAB. 1. Poisons and poisonous plants affecting large and small animals, chemical properties, signs, lesions, diagnosis, treatment.

**VMED 9360 PRODUCTION AND PREVENTATIVE MEDICINE (3)** LEC. 5. Principles of disease prevention and maximization of production application of food safety principles.

**VMED 9370 ONCOLOGY (1)** LEC. 3. Diagnostic and therapeutic measures used to manage animals with oncologic diseases.

**VMED 9380 PHYSICAL DIAGNOSIS II (1)** LEC. 1. LAB. 2. Continued experience in the performance of routine physical examination in small and large animal species. Satisfactory advancement into the second year of the professional (DVM) program.

**VMED 9390 ADVANCED ANATOMY AND SURGICAL SKILLS (1)** LEC. 1. SU. This elective is based on a flipped classroom model. Each enrollee will be required to prepare one PowerPoint presentation selected from the list of cases provided (or the presenter can elect to bring his or her own case based on past experience) and then discuss it with the group. The presenter will carry out research at home ahead of the class. He will get guidance from instructor who will provide additional notes, video and anatomical resources for each of the listed cases. Departmental approval required.

**VMED 9400 EQUINE THERIOGENOLOGY CASE OF THE WEEK (1)** LEC. 1. SU. Departmental approval. This course provides students an introduction to equine theriogenology using clinical cases received on the equine theriogenology service of the J.T. Vaughan Large Animal Teaching Hospital.

**VMED 9410 APPLIED CLINICAL IMAGING (2)** LEC. 3. Define and describe abnormalities of various systems detected through imaging. Course may be repeated for a maximum of 6 credit hours.

**VMED 9420 SMALL ANIMAL NUTRITION (2)** LEC. 2. Proper nutrition for health and disease prevention and treatment in large animals in different stages of life. May count either VMED 9320 or VMED 9420. Course may be repeated for a maximum of 6 credit hours.

**VMED 9440 CLINICAL VETERINARY PARASITOLOGY (1)** LEC. SU. Departmental approval. This course will provide students with a case-based lecture format for expansion of foundational parasite knowledge, focusing on further discussions of the diagnosis, treatment, and prevention of common parasitic problems faced by general practitioners (small animal, large animal, and mixed) in the US. Hosts will include, but not be limited to: dogs, cats, horses, cattle, small ruminants, camelids, poultry and swine.

**VMED 9450 EQUINE VETERINARY HUSBANDRY (1)** LEC. 1. SU. This course is designed to familiarize veterinary students with the basic principles of equine husbandry as related to veterinary medicine, including uses and medical conditions of certain breeds, biosecurity, infectious disease prevention, parasite control programs, dental and hoof care, transport, and nutrition.

**VMED 9460 FELINE MEDICINE ELECTIVE (1)** LEC/LLB. SU. Departmental approval. This course provides an opportunity to increase practical knowledge of a variety of topics in feline medicine. Topics are designed to supplement course work, or include areas that are not covered in depth in regular courses.

**VMED 9470 PRACTICAL KNOWLEDGE FOR EQUINE PRACTITIONERS (1)** LEC. 1. SU. Discussions of common equine practice topics by medicine and surgery clinicians and staff.

**VMED 9480 SPECTRUM OF CARE SERIES: INFORMATION LITERACY (1)** LEC. 1. LAB. 0, LLB. 0. SU. Pr. VMED 9780. As part of the Spectrum of Care Series, this course focuses on identifying, critically evaluating, and applying different types of veterinary literature in academia and different types of private practice models. Additionally, students will be exposed to clinical, novel experiences and research presentations where they will have the ability to think through clinical presentations, provide high-quality feedback, and reflect on applications to their future practice.

**VMED 9490 SPECTRUM OF CARE SERIES: EMERGING TECHNOLOGY (1)** LEC. 1, LAB. 0-2, LLB. 0. SU. Pr. VMED 9780. As part of the Spectrum of Care Series, this course focuses on emerging technologies in veterinary medicine with a heavy focus on the use of artificial intelligence. This course will focus on how research goes from the benchtop to clinical practice and explore how new technology is developed. Additionally, students will explore the risks, benefits, limitations, and use of artificial intelligence and emerging technologies in veterinary medicine.

**VMED 9500 SPECTRUM OF CARE SERIES: PUBLIC SPEAKING AND SOCIAL MEDIA IN MEDICAL PRACTICE (1)** LEC. 1, LAB. 0-2, LLB. 0. SU. Pr. VMED 9780. As part of the Spectrum of Care Series, this course focuses on public speaking and use of social media and its practical use in medical practice. This course will be aimed at discussing the various types of speaking that veterinarians and health care professionals are asked to do, how to prepare to give a talk/ continuing education event, and how to engage guest lecturers about best practices in public speaking.

**VMED 9502 CURRENT TOPICS IN VETERINARY MEDICINE (1)** LEC. 1. SU. Emerging topics in veterinary medicine, current literature. Course may be repeated for a maximum of 15 credit hours.

**VMED 9510 HEMOLYMPHATIC SYSTEM (1)** LEC. 3. LAB. 1. Diagnosis, treatment and prevention of diseases affecting the integumentary and hemolymphatic systems. Course may be repeated for a maximum of 3 credit hours.

**VMED 9520 CARDIOVASCULAR SYSTEM (2)** LEC. 3. LAB. 1. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment and prevention of diseases affecting the cardiovascular system.

**VMED 9530 RESPIRATORY SYSTEM (3)** LEC. 3. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment and prevention of diseases affecting the respiratory system.

**VMED 9540 SMALL ANIMAL ALIMENTARY SYSTEM (2)** LEC. 5. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment and prevention of diseases affecting the alimentary system. Course may be repeated for a maximum of 6 credit hours.

**VMED 9550 URINARY SYSTEM (2)** LEC. 3. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment, and prevention of disease affecting the urinary system.

**VMED 9560 ENDOCRINE SYSTEM (2)** LEC. 3. Pathophysiology, pathologic lesions, diagnosis, treatment and prevention of diseases of the endocrine system.

**VMED 9570 THERIOGENOLOGY (4)** LEC. 5. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment; and prevention of diseases of the reproductive system.

**VMED 9580 NERVOUS SYSTEM (2)** LEC. 5. LAB. 1. Pathophysiology, pathologic lesions, radiographic and ultrasonographic lesions, diagnosis, treatment, and prevention of diseases affecting the nervous system.

**VMED 9590 MUSCULOSKELETAL SYSTEM (3)** LEC. 3. Pathophysiology; pathologic, radiographic and ultrasonographic lesions; diagnosis; treatment; and prevention of diseases affecting the musculoskeletal system.

**VMED 9600 ADVANCED EQUINE PHYSICAL DIAGNOSIS I (1)** LAB. 1. SU. Departmental approval. An introduction to basic physical examination techniques and clinical conditions commonly used when examining horses clinically. Part 1 of a 2 part series, this course introduces students to common clinical conditions that may be encountered in equine practice.

**VMED 9601 VETERINARY CLINICAL ROTATIONS (3)** CLN. 40. Clinical experiences through various specialty service in the Veterinary Medical Teaching Hospital. Course may be repeated with change in topics.

**VMED 9602 RESEARCH PROBLEMS IN BIOMEDICAL SCIENCE (1-10)** RES. SU. Research problems in a variety of specialized disciplines for veterinary students and advanced undergraduates.

**VMED 9610 ADVANCED EQUINE PHYSICAL DIAGNOSIS II (1)** LAB. 1. SU. Departmental approval. This course is a continuation of physical examination techniques and diagnostic procedures used when examining horses clinically. This is the second part of a two part elective to introduce students to common procedures that may be encountered in clinical practice of equine medicine.

**VMED 9620 INTEGRATIVE & COMPLEMENTARY MEDICINE (1)** LEC. 1. SU. Departmental approval. This course will cover concepts in acupuncture, chiropractic adjustment, massage, and physical therapy as applied to veterinary medicine. The laboratory session will allow for hands on experience through application of techniques.

**VMED 9621 CLINICAL ROTATIONS IN VETERINARY MEDICINE (2)** CLN. 40. Clinical practicum experiences in large and small animal teaching hospitals on the veterinary medical campus. Course may be repeated with change in topics.

**VMED 9630 LEGAL PRINCIPLES OF VETERINARY FORENSICS (1)** LEC. 1. SU. Fundamental concepts of animal crimes and the role and responsibilities of veterinarians in reporting animal abuse and identifying, documenting, and processing forensic evidence in a criminal case.

**VMED 9631 ALTERNATIVE ROTATIONS IN VETERINARY MEDICINE (2)** CLN. 40. SU. Clinical practicum experiences in alternative large and small animal disciplines. Course may be repeated with change in topics.

**VMED 9640 LARGE ANIMAL ALIMENTARY SYSTEM (2)** LEC. 5. Pathophysiology, pathologic lesions, diagnosis, treatment and prevention of diseases affecting the large animal alimentary system. Course may be repeated for a maximum of 6 credit hours.

**VMED 9660 BASIC SPANISH FOR VETERINARIANS (1)** LEC. 1. SU. Departmental approval. Learn basic words and terminology used in veterinary medicine, including species, household and farm items, basic body parts, etc.

**VMED 9669 ADVANCED SPANISH FOR VETERINARIANS (1)** LEC. 1. SU. Learn how to communicate in Spanish different diseases, treatments and recommendations for pet owners, including but not limited to dogs, cats, horses, cattle and farm animals. At the end of the course, students should be able to obtain a history, explanation of physical exam and diagnostic tests, description of clinical exam findings, treatments and recommendations.

**VMED 9670 OPHTHALMOLOGY (1)** LEC. 2. LAB. 1. Common procedures for evaluation, diagnosis and treatment of eye disorders in domestic species are covered to provide basic veterinary ophthalmology knowledge to veterinary students.

**VMED 9680 VACCINES (1)** LEC. 1. SU. This course will cover animal and human vaccines, including their history, impact, and recent developments in vaccine technology through evaluation of current primary literature.

**VMED 9690 REPTILE AND AMPHIBIAN MEDICINE (1)** LEC. 1. SU. Diseases, treatment, husbandry, handling, restraint, examination, sample collection in reptiles and amphibians.

**VMED 9700 INTRODUCTION TO ANESTHESIA (3)** LEC. 3. LAB. 1. Principles and practices of veterinary anesthesia in large and small animals.

**VMED 9720 DISASTER MEDICINE FOR VETERINARIANS (1)** LEC. 1. SU. Pr. (VMED 9111 or VMED 5111). Explores the role of the veterinarian in preparing and responding to natural and man-made disasters, including animal health emergencies.

**VMED 9730 SELECT TOPICS IN FOOD ANIMAL MEDICINE (1)** LEC. 1. SU. This course covers a wide variety of topics involving food animals (bovine, swine, small ruminants, camelids and poultry) which are more in depth than in the standard DVM curriculum.

**VMED 9750 DIAGNOSTIC VETERINARY ULTRASONOGRAPHY (1)** LAB. 1. SU. Departmental approval. Basic physics, instrumentation, and scanning techniques of ultrasonography. Normal sonographic anatomy correlated with the cross-sectional anatomy of body structures and organs.

**VMED 9760 INTRODUCTION TO AMERICAN SIGN LANGUAGE (1)** LEC. 1, LAB. 0-1. SU. Introduction to American Sign Language using conversational methods. Covers vocabulary, grammatical usage, and culturally appropriate behavior within the deaf community.

**VMED 9780 CLINICAL CONCEPTS & PROFESSIONAL DEVELOPMENT (1)** LEC. 1. SU. A weekly case-based presentation that illustrates current concepts in the professional DVM curriculum, as well as concepts that are less commonly emphasized in the curriculum. Course may be repeated for a maximum of 6 credit hours.

**VMED 9800 APPLIED SMALL ANIMAL NEUROLOGY (1)** LEC. 1. SU. Clinical management of commonly occurring neurologic diseases of small domestic animals.

**VMED 9801 PRECEPTORSHIP (3)** LAB. 320. SU. Training in a practice situation under the direct supervision of a veterinarian or, under certain conditions, in specialized programs. Approval of Preceptorship Committee.

**VMED 9802 DATA ANALYSIS OF EPIDEMIOLOGICAL STUDIES (1)** LEC. 1. SU. Departmental approval. This course will cover basic data analysis of epidemiological studies that will be especially useful to students considering pursuit of an internship or residency. Epidemiologic techniques emphasized will be outbreak investigation, evaluation of diagnostic tests and disease surveillance.

**VMED 9810 INTEGUMENTARY SYSTEM (2)** LEC. 2. Diagnosis, treatment and prevention of diseases affecting the integumentary system.

**VMED 9820 THERIOGENOLOGY: A CASE-BASED APPROACH (1)** LEC. 1. LAB. 1. SU. Class discussions will surround those topics not covered elsewhere in the core reproductive curriculum (e.g., innate breeding behaviors, advanced techniques such as in-vitro production of embryos, in-depth penile injury management, and advanced dystocia management to name a few). There will be an emphasis placed on current research and literature discussion on a weekly basis.

**VMED 9830 MARINE MAMMAL MEDICINE (1)** LEC. 1. SU. Departmental approval. Students will receive basic, introductory, and cursory instruction on the clinical medicine involved in the management of some marine mammal species commonly found in oceanariums. Provided laboratory session(s) will allow for some minor hands-on experience for the students to illustrate some of the concepts discussed in the course. Availability of laboratory sessions will depend on the status of the animals in the exhibits and is at the discretion of the facility veterinarian and management.

**VMED 9840 WILDLIFE DISEASES (1)** LEC. 1. SU. Control and role of veterinarian in prevention of disease in wild animals, specifically wildlife indigenous to U.S.

**VMED 9850 MARINE ANIMAL ANATOMY AND NECROPSY TECHNIQUES (2)** LAB. SU. Departmental approval. This course will provide an overview of dolphin, pinniped and sea turtle anatomy, necropsy techniques and live and dead animal stranding response. This course will be spread over two weekend-long sessions.

**VMED 9860 SURGERY THROUGH HISTORY AND APPLICATION (1)** LEC/LLB. SU. Pr. P/C VMED 9310. This class will examine the history and development of surgery using many of the historical figures that shaped modern surgery. The overall goal is to obtain a deeper appreciation of the foundations of surgery and how this foundation impacts its current day practice. Classes will focus on the early contributors to both the performance of surgery and the required knowledge supporting its performance, such as aseptic technique and anesthesia.

**VMED 9870 SMALL OCEANARIUM ELECTIVE (1)** LLB. SU. Departmental approval. This course takes place in one weekend-long session on site at Gulf World Marine Park in Panama City Beach, FL. The course provides a brief overview of medicine and husbandry related to the common species found in small oceanariums. Instruction is divided between lecture format and hands-on demonstrations.

**VMED 9890 GENOMICS AND PRECISION MEDICINE (1)** LEC. 1. SU. With this course, the student is expected to have a thorough understanding of the historical and current status of the studies on genomics and personalized medicine, with a specific focus on veterinary species.

**VMED 9900 DVM GRADUATION COURSE (0)** LAB/LEC. SU. Successful completion of this course involves submission of all required competency and case logs, as well as all required graduation assessments.

**VMED 9940 COMPANION ANIMAL THERIOGENOLOGY (1)** LEC. 1. SU. This course gives students an overview of companion animal reproduction. It is clinically based and offers lectures and discussions to provide a better understanding and deeper knowledge of canine and feline reproduction in practice.

**VMED 9950 SPECTRUM OF CARE SERIES: CAPSTONE PRESENTATION (1)** SEM. 1. SU. Culminating the final course in the SOCS this course will allow students to apply the skills from their previous courses and implement them into a final Capstone Presentation. In this course students will work with a mentor to prepare an oral presentation and deliverable based on a clinical case, research project, or novel learning experience around the practice of veterinary medicine. Students will also be responsible for providing peer-to-peer feedback for fellow students.

**VMED 9995 VETERINARY CLINICAL ROTATIONS - EXTERNSHIPS (0)** CLN. Successful completion of didactic veterinary curriculum. Students will participate in clinical rotations including specialty rotations.