VETERINARY CLINICAL MEDICINE (VCM)

VCM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/VCM)

Courses

VCM 501 Zoological Medicine Seminar  
Discussion of selected topics and literature pertaining to zoological, wildlife and aquatic animal medicine and presentation of a formal seminar. May be repeated to a maximum of 6 hours. Prerequisite: Post DVM and enrolled in the Zoological and Aquatic Animal Residency Program.

VCM 502 Issues in Clinical Research  
This course is intended for students interested in applying analytical epidemiological methods in assessing the health and disease status of populations (animal and human) and assessing the factors affecting that status. It includes lecture/discussion sessions and exercises on the study design, statistical analysis, and interpretation of clinical trials and cross-sectional, case-control, and longitudinal studies. Database management, risk assessment, and techniques for enhancing the validity of field-based studies of naturally occurring disease will also be covered. Prerequisite: Consent of instructor.

VCM 503 Current Lit in Equine Med Surg  
This course will use current primary literature in the fields of equine medicine and surgery as a gateway to discussion. Current literature will be reviewed, critiqued, and discussed in the context of current equine clinical practice. Students are expected to be graduate veterinarians with a thorough understanding of equine medical and surgical concepts before enrolling in the course. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 506 Topics in Pathophysiology  
Current basic and advanced concepts in hemostasis (primary hemostasis, secondary hemostasis, fibrinolysis, normal and abnormal endothelium, natural anticoagulants, anticoagulant drugs and their mechanisms of action) and respiratory physiology and pathophysiology (including acid base and strong ion difference). Prerequisite: DVM degree.

VCM 508 Trans Mol Path Veterinary Dz  
Translation Molecular Pathogenesis of Veterinary Disease (Trans Mol Path Veterinary Dz) equips graduate students with knowledge and skills needed to understand molecular pathologic processes and determine how they translate to clinical manifestations of disease. The pathologic processes to be covered including those involved in cellular response to stress, inflammation, tissue repair, circulation and hemodynamics, immunity, cancer, and infectious disease. Translational associations that link pathologic mechanisms with disease manifestations commonly encountered in companion animal veterinary practice will be emphasized and will promote comprehensive bench-to-bedside learning.

VCM 510 Science of Animal Well-Being  
Reviews scientific literature on the well-being of agricultural animals. Topics include indicators of well-being, causes and indicators of stress, impact of housing, management, and veterinary practices on well-being, and enrichment methods. Topics relevant to all major agricultural animal species (swine, dairy cattle, beef cattle, horses, poultry, and sheep) will be covered each semester, in accordance with the interests of enrolled students. Students will critically review and summarize literature and lead and participate in class discussions. Grades will be based on attendance, quality of performance, and a final examination. Same as ANSC 510. Prerequisite: Graduate student in the College of Veterinary Medicine or College of ACES, or consent of instructor.

VCM 511 Seminar in Prod/Pop Medicine  
Same as PATH 511. See PATH 511.

VCM 522 Adv Comp Theriogenology  
Advanced study on the principles and practice of theriogenology in domestic and non-domestic animals. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 524 Effective Biomedical Teacher  
Provides current or future university-level biomedical educators with the knowledge, motivation and proficiencies needed to apply the most recent developments in higher education to their teaching. The overall aim of the course is to cultivate an informed, passionate and adventurous approach to teaching and learning in participants. This will be achieved by fostering new thinking about teaching and learning, and by encouraging collaborative and cooperative learning between the class members. May be repeated in separate terms if topics vary.

VCM 536 ECC Journal Topics  
This is a weekly course aimed at evaluating journals specific to the requirements of the American College of Veterinary Emergency and Critical Care. Seminars of selected articles will be presented to the group every week. 1 graduate hour. Approved for S/U grading only.

VCM 542 Ocular Pathology  
Same as PATH 542. See PATH 542.

VCM 553 Advanced Diagnostic Imaging  
Reviews the physics, clinical indications and technical aspects of advanced diagnostic imaging. The course will utilize clinical case examples. Studies are required to prepare one lecture and take a final examination. Attendance at 80% of the classes is required. May be repeated in separate terms for unlimited graduate credit.

VCM 572 Clinical Epidemiology  
Reviews the common epidemiologic and statistical methods used to design studies, analyze data, and interpret diagnostic tests and research findings. 4 graduate hours.

VCM 577 Advanced Large Animal Medicine  
A seminar series devoted to intense study of pathophysiologic and current therapeutic aspects of selected topics in large animal internal medicine. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 581 Emergency Diagnostic Imaging  
Provides graduate students in emergency medicine, small animal surgery and diagnostic imaging the opportunity to share principles of diagnostic imaging based on recent case examples. Students will be expected to present at least two cases demonstrating competence in reviewing radiographic findings, formulating a list of differential diagnoses and discussing additional imaging modalities, as appropriate. 1 graduate hour. May be repeated in separate terms to a maximum of 9 graduate hours.

Information listed in this catalog is current as of 04/2016
VCM 584  Current Concepts Comp Surgery  credit: 1 Hour.
Advanced study of topics concerning the pathophysiology, diagnosis, and current therapy of diseases which are treated with surgical procedures. May be repeated to a maximum of 4 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 585  Current Lit Sm Anim Medicine  credit: 1 Hour.
Participants will discuss and analyze current veterinary journal articles which pertain to small animal internal medicine. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian.

VCM 588  Advances in Vet Dermatology  credit: 1 or 2 Hours.
A series of lectures, seminars and discussions devoted to the intense study of pathophysiologic aspects of the integument and related systems including: structure and functions, endocrinology, immunology, microbiology, virology, parasitology, pharmacology, oncology, and miscellaneous disorders. Students enrolling for graduate credit will also participate in weekly critiques of current literature. May be repeated to a maximum of 8 hours; duplicate registration is permitted up to 4 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 590  Seminar  credit: 0 to 1 Hours.
Required of all graduate students whose major is Veterinary Clinical Medicine. Approved for S/U grading. May be repeated.

VCM 591  Advances in Vet Internal Med  credit: 0 or 1 Hours.
A series of lectures, seminars, and discussions devoted to intense study of new pathophysiologic aspects of selected topics in veterinary internal medicine. Each term is devoted to three topics. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 592  Special Problems  credit: 1 to 4 Hours.
Basic and applied study including orientation and research on pertinent initial and continuing problems in the student’s area of interest. May be repeated. Prerequisite: Consent of instructor.

VCM 593  Adv Topics Vet Clin Med  credit: 1 to 4 Hours.
Instruction in advanced diagnosis, therapeutic modalities, and research methodologies in the areas of small animal internal medicine, small animal surgery, equine and food animal medicine and surgery, ophthalmology, theriogenology, radiology, and clinical pharmacology. May be repeated to a maximum of 8 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 598  Manuscript Research  credit: 0 to 12 Hours.
Independent research to fulfill requirement for non-thesis alternative in Master of Science Program. Credit is not given for both VCM 598 and VCM 599. (Summer Session, 1 to 2 hours.) Prerequisite: Must be enrolled in the departmental graduate program.

VCM 599  Thesis Research  credit: 0 to 12 Hours.
Approved for S/U grading only. May be repeated.

VCM 601  Clinical/Laboratory Practice  credit: 1.5 to 6 Hours.
Individual customized clerkship in clinical medicine and surgery for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 9 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 604  Equine Medicine and Surgery  credit: 1.5 to 4.5 Hours.
Clerkship in equine medicine and surgery for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 12 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 608  Equine Veterinary Husbandry  credit: 1 Hour.
Designed to familiarize veterinary students with the basic principles of equine husbandry, including biosecurity, infectious disease prevention, anti-parasite programs, dental care, transport, and nutrition. Approved for both letter and S/U grading. Prerequisite: Good standing in the veterinary professional curriculum, Graduate College, or consent of instructor.

VCM 611  Dermatology  credit: 1.5 Hours.
Clerkship in dermatology for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 612  Oncology  credit: 1.5 Hours.
Clerkship in oncology for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 613  Clinical Neuro/Neurosurgery  credit: 1.5 Hours.
Clerkship in neurology and neurosurgery for VM-4 professional students. Students will obtain basic skills in diagnosis, treatment, and care of medical and surgical neurological diseases. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 615  Ophthalmology  credit: 1.5 Hours.
Clerkship in ophthalmology for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 620  Food Animal Selective Rotation  credit: 1.5 to 6 Hours.
Enables fourth year veterinary students to expand their clinical experience in food supply veterinary medicine by taking rotations at off-campus locations with different training opportunities than are available at the University of Illinois at Urbana-Champaign. Approved for S/U grading only. May be repeated to a maximum of 15 hours. Only students in the food animal track may take this course for food animal selective credit. Students in all tracks may take this course for free elective credit. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 624  Bereavement Issues  credit: 1 Hour.
Theoretical and clinical perspectives on the concepts of attachment, bonding, grief and loss will be discussed. The course also includes instruction in basic counseling and crisis intervention skills. Students will answer calls on the CVM C.A.R.E. Helpline under the supervision of the instructor.

VCM 625  Exotic Mammal Medicine  credit: 1 Hour.
Exotic Mammal Medicine is an elective course for veterinary students in their second year of the veterinary curriculum or graduate students interested in zoology. Students will learn clinical aspects of comparative anatomy, physiology, husbandry and handling of exotic mammal species encountered in zoological practice, including rodents, lagomorphs, marsupials, canids, carnivores, primates, and cervids. The most commonly encountered diseases of these species will also be discussed. 1 graduate hour. 1 professional hour. Approved for both letter and S/U grading. Prerequisite: Enrollment in the 2nd year veterinary curriculum.
VCM 626  Shelter Medicine I  credit: 1 Hour.
Introduction to the field of Shelter Animal Medicine and is intended to create a pool of well-informed veterinarians that will become an important resource for shelter managers nationwide. This course is a prerequisite for the more advanced Shelter Medicine II (offered in the third year). Course will foster veterinarian participation in community service and encourage personal responsibility in the area of animal welfare. Offered for S/U grading only.

VCM 627  Equine Infectious Disease  credit: 1 Hour.
Provides an in-depth review of common equine infectious diseases (viral, bacterial, parasitic) according to body systems. Primarily uses a lecture-based format to review the key aspects of disease pathogenesis, common clinical signs and most appropriate diagnostic test(s) for pathogen identification. Lectures are followed by several (3-4) cases that the lecturer will review in class with the students. These cases will be designed to emphasize the essential aspects of the different infectious diseases and generate critical thinking by the students with regards to developing an appropriate diagnostic plan. Approved for S/U grading only.

VCM 634  GP Surg. Oncology  credit: 1 Hour.
A five-week course focusing on the theory and practice of small animal surgical oncology for general practice. This course will provide students with the theory and practical skills required to diagnose and treat surgical oncology cases at a primary care level. The module includes lectures and cadaver laboratories pertaining to the principles of surgical oncology and the diagnosis, treatment and prognosis of specific neoplasms. In the laboratories, students will practice a variety of biopsy techniques, cutaneous and subcutaneous tumor resection, intestinal resection and anastomosis, visceral tumor resection and limb amputations. No graduate credit. 1 professional hour. Prerequisite: VM 608. DVM professional students only.

VCM 635  Advanced Soft Tissue Surgery  credit: 1 Hour.
Seven-week course during the second half of the Fall semester focusing on the theory and practice of small animal soft tissue surgery. This course covers many of the soft tissue surgical procedures which new veterinary graduates are expected to competently perform. Procedures to be covered include bandaging and wound management, drain placement, declaw, dewclaw removal, tendonectomy, aural hematoma repair, pinna repairs, biopsies, surgery of the integument, gastrointestinal surgery, limb amputations and mastectomy. Approved for S/U grading only. Prerequisites: VM 605, VM 606, VM 607 and VM 608.

VCM 640  Advanced Orthopedic Surgery  credit: 1 Hour.
This course will provide hands-on training in fracture fixation and common knee and hip procedures to veterinary students with an interest in orthopedic surgery. This hands-on training is not available in the core course. Approved for S/U grading only. Prerequisite: Third year standing in the veterinary curriculum.

VCM 641  Equine Neonatology  credit: 1 Hour.
Designed to familiarize the veterinary student with the basic and advanced principles of equine neonatology. Topics include normal and abnormal physiology, problems of the mare that impact the foal, prematurity, sepsis, uremia, musculoskeletal problems, and therapy. 1 graduate hour. 1 professional hour. Approved for S/U grading only.

VCM 642  Equine Critical Care  credit: 1 Hour.
Familiarizes the veterinary student with the basic and advanced principles of equine critical medicine. Topic include normal and abnormal physiology particularly as it relates to shock and systemic inflammatory response syndrome (SIRS); point-of-care testing, clinical pathology and other testing techniques, including cardiovascular and imaging, for assessment and monitoring of critically ill horses; responsible antimicrobial use in critically ill horses; and end of life conversations. 1 graduate hour. 1 professional hour. Prerequisite: VM 606.

VCM 643  Equine Emergency Medicine  credit: 1 Hour.
Familiarizes the veterinary student with the basic and advanced principles of emergency care for adult horses. Topics include gastrointestinal, musculoskeletal, respiratory, central nervous system, ophthalmic, and urogenital emergency problems of the horse. Particular attention will be paid to gastrointestinal disease of the horse that present as an emergency, such as colic, enteritis, and typhlocolitis. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VM 606.

VCM 644  Veterinary Pain Management  credit: 1 Hour.
This 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. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: For students in the veterinary professional program only.

VCM 645  Equine Surgery Laboratory  credit: 1 Hour.
Provides introductory laboratory experiences in common and basic equine surgical techniques. Topics include normal and cryptorchid equine castration, distal limb surgeries, casting techniques, and joint injections. Approved for S/U grading only. Prerequisite: VM 606.

VCM 646  Lab Animal Science I  credit: 1 Hour.
Addresses fundamental issues in Laboratory Animal Sciences including history, regulatory aspects, ethical considerations, and basic biology and husbandry of common laboratory animal species. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: Second or third-year standing in the veterinary medicine curriculum, registration in the graduate college, or consent of instructor.

VCM 648  One Medicine: One Health  credit: 3 Hours.
Explores the interrelatedness of human, animal and environmental health with a focus on new and emerging diseases. Through a combination of lecture, class discussion and small group projects, students will learn about how human, animal and ecosystem health are all affected by many of the same factors and how the health of one affects the health of the others. Public policy affecting community health will be discussed and new policy initiatives will be developed by students. Approved for letter and S/U grading.

VCM 649  Avian Medicine and Surgery  credit: 2 Hours.
Avian species represent a significant segment of the companion animal population. Their anatomy, physiology, and behavior are substantially different from traditional species. Intended to provide students with the knowledge and skills required a practice clinical avian medicine and surgery. Diagnostic and therapeutic principles, as well as diseases of companion avian species are included. 2 graduate hours. 2 professional hours. Approved for letter and S/U grading.
VCM 650 Clinical Sm Animal Dentistry  credit: 1.5 Hours.
Clerkship in small animal dentistry for VM-4 professional students. Students will assist in the diagnosis and treatment of dogs and cats with dental disease. The psychomotor skills laboratory will be available for students practicing dental procedures on models and frozen specimens. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth-year standing or equivalent in the veterinary medicine curriculum and with prior consent of instructor.

VCM 656 Lab Animal Science II  credit: 1 Hour.
Continuation of VCM 646. Additional topics include laboratory animal diseases, biohazard control, gnotobiology and animal models of human disease. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VCM 646 or equivalent, or consent of instructor.

VCM 657 Shelter Medicine II  credit: 1 Hour.
Series of lectures/discussions focusing on the history of the humane movement and animal control in the United States and abroad, legal issues for animal control/welfare, the association of domestic violence, animal abuse, and animal fighting, shelter animal medicine and operation, infectious disease management in the shelter setting, population control/epidemiology, feral animal issues, and animal behavior. The "laboratory" portion entails a optional field trip or out rotations with The Anti-Cruelty Society in Chicago, the Champaign/Urbana Humane Society, and CCHS. Approved for S/U grading only. Prerequisite: VCM 626.

VCM 660 Advanced Equine Anatomy  credit: 1 Hour.
Designed to provide an in-depth assessment of the unique anatomical characteristics of the horse with focused attention to clinically important aspects of equine anatomy. The material will cover the anatomy of the head, larynx and pharynx, gastrointestinal anatomy and function, and musculoskeletal anatomy in particular detail, relating equine anatomy to the diagnostic and surgical approaches used in the management of diseases involving these body systems. Prerequisite: VCM 604.

VCM 661 Advanced Equine Lameness  credit: 2 Hours.
Covers equine lameness from a clinician’s perspective. Offers an in-depth integrative approach to the diagnosis of equine lameness using the presenting complaint as a starting point. Rather than approaching equine musculoskeletal disease from the perspective of specific injuries, students will be guided through the lameness examination process. Active student participation in class discussion is expected. 2 professional hours. May not be repeated for credit. Prerequisite: Third year veterinary student.

VCM 663 Small Animal Dermatology  credit: 1 Hour.
First half of the course presents a systematic approach to small animal dermatologic diagnoses and therapeutics; the second half deals with immunological disorders, seborheic syndromes, hereditary disorders, cutaneous neoplasms, and feline dermatology. Prerequisite: VCM 631 or equivalent, or consent of instructor.

VCM 664 Wildlife and Exotics  credit: 1.5 or 3 Hours.
Clinical experience pertaining to wildlife and exotic pet species including avian, reptile, amphibian, and small mammal species. Exposes participants to all aspects of non-traditional species care including medicine, surgery, husbandry, population considerations, infectious and zoonotic disease principles and shelter medicine. Participants will work with patients of the Wildlife Medical Clinic, the Exotic Animal service, the Acute Illness Center and participating shelters. A basic understanding of anatomy, physiology, husbandry and handling of non-traditional species is required as is the completion of a relevant project by the end of the course. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Fourth year standing in the veterinary medicine curriculum, 1 semester of previous participation on the Wildlife Medical Clinic or other demonstrated interest in non-traditional species medicine approved by the course instructor.

VCM 666 Shelter Animal Med and Surg  credit: 1.5 to 4.5 Hours.
Partnering with Chicago’s Animal Care and Control, The Anti-Cruelty Society of Chicago, and the Champaign County Humane Society, this course will provide a truly unique community veterinary practice program for the low income populations of Chicago and Champaign County. Clinical rotations at these facilities will expose veterinary students to community practice through a low income clinic and shelter setting and explore new ways of improving animal health and welfare, alleviating animal suffering, abuse and abandonment, and protecting public health. Approved for S/U grading only. May be repeated to a maximum of 6 hours. Prerequisite: VCM 657.

VCM 669 Primary Care Elective Rotation  credit: 1.5 to 3 Hours.
Externship at a general private veterinary practice in the United States. This elective clinical rotation will expose students to primary and preventive veterinary medical care of small and/or large animals in a private practice setting, and will familiarize students with the business and operational aspects of private practice. Approved for S/U grading only. May be repeated in the same or subsequent terms to a maximum of 3 hours. Prerequisite: All preclinical and paraclinical core courses in the veterinary medicine professional curriculum.

VCM 671 International Vet Medicine  credit: 1 Hour.
Discussion of selected topics relevant to animal welfare and disease in the global society and, with guest speakers, of political issues of different continents. Students present a short seminar on a topic of choice. Prerequisite: DVM student.

VCM 672 Food Supply Disease Prevention  credit: 1 Hour.
This course is designed to familiarize the student with the basic principles of food supply disease control. The first half of the course is designed to enhance the student’s ability to detect disease with observation of necropsy lesions at the gross level. The second half of the course will cover immunizations and the judicious use of antimicrobials. 1 graduate hour. 1 professional hour. Prerequisites: VCM 690 or permission of the instructor if a graduate student or house officer.

VCM 673 Companion Animal Rehab  credit: 1 Hour.
Series of lectures/discussions focusing on the proper application of companion animal rehabilitation modalities. Designed to give an understanding of the basics of rehabilitation and begin the thought process of implementing rehabilitation in to veterinary medicine. Prerequisite: Registration in the veterinary curriculum or consent of the instructor.
VCM 674  Equine Exercise Physiology  credit: 1 Hour.
Designed to familiarize veterinary students with the basic principles of equine exercise, physiology and sports medicine. Topics include physiology, energetics, thermoregulation, fatigue, conventional and alternate training techniques, and drugs and medications used in equine athletes. Approved for letter and S/U grading. Prerequisite: Good standing in the veterinary professional curriculum, Graduate College, or consent of instructor.

VCM 677  Study Abroad Germany  credit: 1.5 Hours.
Study Abroad Program to learn about public health issues and regulations in Germany. Approved for S/U grading only.

VCM 678  Reptile Medicine & Surgery  credit: 1 Hour.
Provides an introduction to reptile medicine and surgery. Specific topics to be addressed include non-infectious and infectious diseases, diagnostic sampling techniques, anesthesia and analgesia, and common surgical procedures for reptiles. Approved for S/U grading only.

VCM 679  Adv Veterinary Ophthalmology  credit: 1 Hour.
Anatomic, physiologic, pathologic, and pharmacologic considerations in eye diseases and their treatments; instrumentation and methods of study of ocular structure, physiology, and diseases; and laboratories devoted to techniques of examination of the eye and surgical procedures used in treatment of eye diseases. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Third-year standing in veterinary medicine curriculum.

VCM 681  Adv Equine Internal Medicine  credit: 1 or 2 Hours.
Advanced instruction in case management, laboratory data interpretation, decision-making regarding therapeutics, and advanced diagnostic techniques. Approved for S/U grading only. Prerequisite: Consent of instructor.

VCM 682  Wildlife Medicine  credit: 1 Hour.
An 8-week elective course for veterinary students offered in their second or third year of the veterinary curriculum. Participation in weekly rounds and team meetings, for the purpose of independent study and training, is required. Students will be required to maintain a personal clinic journal describing case work, training, and self-assessment. Team leaders should include any training that they conduct for their teams. The journals will be reviewed at the end of the semester by the course instructors. Available to VM2 students during the first and second 8-week terms of the spring term. Available to VM3 students during the first and second 8-week terms of the fall term. May be repeated with the same term to a maximum of 2 hours. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Enrolled students must be an active member assigned to a treatment team in the Wildlife Medical Clinic.

VCM 684  Client Relations  credit: 1 Hour.
Introduction to client relations, including techniques of effective verbal and nonverbal communication and applications of these techniques for veterinary students.

VCM 685  Advanced Diagnostic Imaging  credit: 1 Hour.
Stresses imaging principles and comparative anatomy, using clinical cases as examples for echocardiography, diagnostic ultrasound, nuclear medicine, CT and MRI. Prerequisite: First, second or third year veterinary students or by consent of instructor.

VCM 686  ZooMed: What is Your Diagnosis  credit: 1 Hour.
A series of interactive, non-domestic animal cases will be discussed during each meeting. Expands a veterinary student's confidence and diagnostic skill when working with these species. Approved for S/U grading only. May be repeated in separate terms to a maximum of 2 hours.

VCM 687  Canine Occupational Health I  credit: 1 Hour.
This course will address the most common occupations for working and performance dogs and how these occupational activities may impact health. Subjects covered in this course will include handling of working dogs, breed predisposition to disease, equipment and its proper use, nutrition, rehabilitation and physical therapy, pain management, alternative therapies and prevention strategies in managing occupation-related illnesses in working and performance dogs. The course will be presented in lecture format. No graduate credit. 1 professional hour. Prerequisite: First, Second or Third year standing in the DVM curriculum or permission of instructor.

VCM 688  Food Supply Disease Management  credit: 1 Hour.
This course is designed to familiarize the veterinary student with the principles of disease management of the major body systems in herd situations. The student will be given case examples and opportunities to evaluate and treat diseases of the respiratory and enteric systems as well as multiple periparturient diseases. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VCM 672 or permission of the instructor if a graduate student or house officer. Class Scheduled

VCM 689  Intro to Food Supply Medicine  credit: 1 Hour.
This course is designed to familiarize the student with the basic principles of food supply veterinary medicine. Topics include epidemiologic investigation, veterinary inputs into food supply systems, reproductive aspects associated with production systems and therapeutic standards in food production. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VM 601 or permission of the instructor.

VCM 690  Special Problems  credit: 1 to 3 Hours.
Individual research on a special problem chosen in consultation with the instructor and department head. 1 to 3 graduate hours. 1 to 3 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Enrollment in veterinary medicine curriculum with grade point average of 3.0 or above, or consent of instructor.

VCM 692  Comparative Anatomy - Zoo  credit: 1 Hour.
The comparative anatomy of zoological species commonly encountered in clinical practice will be discusses in lecture format followed by laboratory dissection of cadavers. Additionally, radiographic anatomy of these species will be discussed. Species covered include representatives of the taxonomic Classes Chondrichthyes, Osteichthyes, Amphibia, Reptilia, Aves, Mammalia. Cadaver specimens include bony fish, sharks, frogs, iguana, turtles, snakes, birds (pigeons), rats and rabbits. Emphasis will be placed on anatomical differences as related to domestic species. Meets for one hour of lecture and two hours of laboratory. one or two times each week during the eight weeks of the course for a total of eight lecture hours and 16 laboratory hours. Approved for S/U grading only.

VCM 693  Veterinary Clinical Medicine  credit: 1 to 3 Hours.
To be used to designate a trial or experimental course for five or more students, designed to be an elective in the CVM professional curriculum. The course can be taught under this designation for two years or two offerings, whichever time is greater. 1 to 3 graduate hours. 1 to 3 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Registration in the veterinary medicine curriculum or consent of instructor.
VCM 695 Food Supply Decision Making  credit: 1 Hour.
This course is designed to enhance veterinary student knowledge of case management and allow them to utilize case information to make decisions. The course will be laboratory and problem based with the opportunity to use antemortem and postmortem samples of animals with disease to evaluate therapeutic and management outcomes. 1 professional hour. Approved for S/U grading only. Prerequisite: VCM 688.

VCM 696 Fish Medicine and Surgery  credit: 1 Hour.
Introduction to ornamental fish medicine and surgery. Specific topics to be addressed in this course include non-infectious and infectious diseases, diagnostic sampling techniques, anesthesia and analgesia, and common surgical procedures for fish. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading.

VCM 697 Adv Topics of Feline Medicine  credit: 1 Hour.
Presents basic aspects of feline medicine, feline preventive medicine and current medical topics in feline internal medicine. Approved for S/U grading only.

VCM 698 Adv Small Animal Dentistry  credit: 1 Hour.
The recognition and appropriate treatment of various types of feline and canine dental diseases will be discussed. The laboratories will be utilized to assist students in the determination of the appropriate diagnosis based on dental radiographs, photographs and models. Oral surgery, periodontic and endodontic therapy will also be performed in the laboratory. 1 graduate hour. 1 professional hour. Approved for S/U grading only.