

SCHOOL OF VETERINARY MEDICINE (VET)

School of Veterinary Medicine

VET 299 – Research (1-15 units)

Course Description: Research.

Prerequisite(s): First-, second- and third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 1-15 hour(s).

Repeat Credit: May be repeated 6 time(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 400 – Professional & Clinical Skills – Y1 (2-18 units)

Course Description: Outline expectations and skill set required to participate successfully in the DVM curriculum as well as providing learning opportunity in communication, team-building, leadership, conflict management, stress management, critical thinking, professional behaviors, history taking, physical examination skills and medical record keeping.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 401 – Basic Foundations (2-18 units)

Course Description: Essential basic information regarding histology, general pathology, biochemistry, pharmacology and population health that is foundational to all blocks.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 402 – Heme/Lymph/Coag (2-18 units)

Course Description: The lexicon, morphology, production, structure and function of peripheral blood cells, their bone marrow precursors and the lymphoid system, the process and regulation of hemostasis, and the laboratory evaluation of all of these in health and disease.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 403 – Musculoskeletal (2-18 units)

Course Description: Anatomy, histology, and physiology necessary for understanding form and function of the bones, joints, muscles, and tendons in producing locomotion; and the pathologic processes that produce typical responses to injury of musculoskeletal structures in domestic animals.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 404 – Neuroscience/Senses/Behavior (2-18 units)

Course Description: Establish a basis for clinical neurology, ophthalmology, and behavior by providing an integrated study of normal neurobiology, neuroanatomy, neurophysiology, neuropathology, neurpharmacology, neurotoxicology, ophthalmology and behavior.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 405 – Gastrointestinal/Metabolism (2-18 units)

Course Description: Examine interrelatedness and functions of the organs associated with the gastrointestinal tract. Applied problems in pharmacology, physical examination, diagnostic testing, and imaging are used to reinforce a basic understanding of organ anatomy, physiology, pathophysiology, and nutrition/metabolism.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 406 – Pharmacology/Nutrition/Toxicology (2-18 units)

Course Description: Basic principles of nutrition and toxicology as well as pathophysiologic changes, diagnostic procedures and treatments of nutritional diseases and intoxications of domestic animals and wildlife. Incorporate case examples and directed self-learning to reinforce important concepts.

Prerequisite(s): Consent of instructor; first-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 407 – Connections – Y1 (1.5 units)

Course Description: Integrate basic and preclinical material working with senior student in a clinical environment.

Prerequisite(s): First-year standing in the School of Veterinary Medicine.

Learning Activities: Clinical Activity 15 hour(s).

Grade Mode: S/U only.

VET 408 – Cardiology/Respiratory (2-18 units)

Course Description: Normal cardiovascular and respiratory system biology and the integrated response of those systems to injury or disease.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 409 – Renal/Urinary (2-18 units)

Course Description: Examine and explore the normal morphology (gross and microscopic), physiology, pathology and imaging of the upper and lower urinary tract in multiple species.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 410 – Endocrinology/Reproduction (2-18 units)

Course Description: Anatomy and histology of endocrine glands and reproductive systems in males and females. Understand the physiology and pathology at the molecular, cellular and organismal level.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 411 – Skin (2-18 units)

Course Description: Structure and function of the skin and specialized keratinized structures in veterinary species. Review mechanisms by which skin responds to perturbations and discuss wound healing and skin pathology.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 412 – Oncology (2-18 units)

Course Description: Basic mechanisms, etiology, causes and the approach to diagnosis and treatment of cancer with emphasis on veterinary patients.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 413 – Immunology/Infectious Disease (2-18 units)

Course Description: Integrate immunology, microbiology, virology, parasitology of common infectious, zoonotic and foreign animal diseases.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 414 – Population Health (2-18 units)

Course Description: Principles of evidence-based medicine, study design and inference, and disease transmission in populations. Topics include biostatistics, outbreak investigation and response, diagnostic tests, vaccine strategies, food safety, foreign animal diseases, and impact of environmental health on animals and humans.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 415 – Clinical Foundations (2-18 units)

Course Description: Essential concepts that are shared across year three blocks to include foundational material in anesthesia, surgery and emergency medicine with cases that include interpretation of clinical pathology and imaging.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 416 – Connections – Y2 (1.5 units)

Course Description: Integrate basic and preclinical material working with a senior student in a clinical environment. *Prerequisite(s):* Enrollment Restrictions: Credit Limitation(s): Cross Listing: Repeat Credit: General Education: Grade Mode: S/U only.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Description: Learning Activities: Clinical Activity 15 hour(s).

VET 417 – Professional & Clinical Skills – Y2 (2-18 units)

Course Description: Continue to build on foundations from freshman year in communication, history-taking, client interactions, team-building, conflict and stress management and professional behaviors.

Prerequisite(s): Second-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 430 – Core Stream (2-18 units)

Course Description: Longitudinal stream to include law, ethics, regulatory medicine, business, communication and disaster medicine.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 431 – Anesthesia & Surgical Stream (2-18 units)

Course Description: Introduction to surgical anatomy, operative and anesthetic skills.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 432A – Comparative Stream I (2-18 units)

Course Description: Approach commonly encountered diseases and medical problems across multiple species. Development of problem-solving skills related to the medical problems of all species from the level of individual animals to groups/herds/populations.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 432B – Comparative Stream II (2-18 units)

Course Description: Approach commonly encountered diseases and medical problems across multiple species. Development of problem-solving skills related to the medical problems of all species from the level of individual animals to groups/herds/populations.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 432C – Comparative Stream III (2-18 units)

Course Description: Approach commonly encountered diseases and medical problems across multiple species. Development of problem-solving skills related to the medical problems of all species from the level of individual animals to groups/herds/populations.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 433A – Small Animal Stream I (2-18 units)

Course Description: Clinical manifestations, diagnostic methods, and the medical and surgical approaches to the infectious, musculoskeletal, neurologic and ophthalmologic diseases of small animals.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 433B – Small Animal Stream II (2-18 units)

Course Description: Clinical manifestations, diagnostic methods, and the medical and surgical approaches to the dermatologic, dental, and gastrointestinal diseases of small animals as well as preventative medicine and nutrition.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 433C – Small Animal Stream III (2-18 units)

Course Description: Clinical manifestations, diagnostic methods, and the medical and surgical approaches to the cardiorespiratory, endocrine, and urinary medicine as well as diagnosis and therapy of oncologic diseases in small animals. Introduction to companion, avian, and exotic pet medicine and surgery.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 434A – Large Animal Stream I (2-18 units)

Course Description: Fundamentals of entry level large animal medicine and surgery to promote development of problem-solving skills for diagnosis, treatment and control of various disease conditions.

Prerequisite(s): Third- and/or fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 434B – Large Animal Stream II (2-18 units)

Course Description: Continuation of fundamentals of entry level large animal medicine and surgery to promote development of problem-solving skills for diagnosis, treatment and control of various disease conditions.

Prerequisite(s): Third- and/or fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 435A – Large Animal Stream–Equine Emphasis (2-18 units)

Course Description: Fundamental and advanced levels of equine medicine, surgery, lameness and reproduction. Focus on management of individual equids.

Prerequisite(s): Third- and/or fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 435B – Large Animal Stream–Livestock Emphasis (2-18 units)

Course Description: Fundamental and advanced levels of livestock medicine and surgery of individual animals and population health. Focus on all livestock species including cattle, sheep, goats, pigs and poultry.

Prerequisite(s): Third- and/or fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 435C – Large Animal Stream–Zoological Medicine Emphasis (2-18 units)

Course Description: Taxon- and topic-based approach to learning zoological medicine. Anatomy, physiology, nutrition, management, anesthesia, medicine, surgery and pathology on non-domestic free-ranging and captive species.

Prerequisite(s): Third- and/or fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 436 – Companion Small Mammals (2-18 units)

Course Description: Fundamental understanding of the etiology, clinical presentation, diagnostic evaluation, treatment, prevention, and control of medical diseases of companion small exotic mammals.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 437 – Reptile & Avian Health (2-18 units)

Course Description: Organized by organ systems to present reptile and avian health issues. Overview of applied anatomy, physiology and clinical pathology of common species will be provided through laboratory opportunities and discussion of common diseases and treatments.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 438 – Poultry (2-18 units)

Course Description: Introduction to practical poultry medicine. Gross pathology, biosecurity and basic diagnostic tests. Visits to hatcheries, broiler, layer and turkey farms.

Prerequisite(s): Third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 439 – Laboratory Animal (2-18 units)

Course Description: Basics of laboratory animal medicine including diseases, medicine, and surgery and comparative biology of the most common species and introduction to regulations. Combination of lecture, wet labs, and projects.

Prerequisite(s): Consent of instructor; third-year standing in the School of Veterinary Medicine.

Learning Activities: Variable 2-18 hour(s).

Grade Mode: Letter.

VET 440 – Business & Communication (1.5 units)

Course Description: Develop professional communication and business skills that are directly applicable in veterinary clinical practice by actively participating in a wide variety of interactive learning opportunities.

Prerequisite(s): Third- and fourth year standing in the School of Veterinary Medicine.

Learning Activities: Discussion 1.50 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 441 – Clinical Pathology (1.5 units)

Course Description: Application of problem-solving and microscopy skills to laboratory data and laboratory specimens. Sections to include hematology, immunology, body fluids, exfoliative cytology, urinalysis, microbiology and clinical chemistry data and interpretation.

Prerequisite(s): Third- and fourth year standing in the School of Veterinary Medicine.

Learning Activities: Discussion 1.50 hour(s).

Grade Mode: Satisfactory/Unsatisfactory only.

VET 442 – Advanced Clinical Skills & Hospital Operations (3 units)

Course Description: Development of advanced clinical skills using skills learned in years 1–3 of the DVM curriculum as a foundation. Detailed orientation to the VMTH and VMACS, with a focus on global hospital operations that will prepare students for case management in year 4 of the DVM curriculum and for clinical practice following graduation. Some evenings and weekends required.

Prerequisite(s): Consent of instructor; third- and fourth-year standing in the School of Veterinary Medicine.

Learning Activities: Clinical Activity 10 hour(s).

Grade Mode: S/U only.

VET 492 – Internship (1-12 units)

Course Description: Internship experience off and on campus in the subject of veterinary science. Internships are supervised by a member of the faculty.

Prerequisite(s): Consent of instructor.

Learning Activities: Internship 3 to 36 hour(s).

Repeat Credit: May be repeated for credit.

Grade Mode: Satisfactory/Unsatisfactory only.