Clinical Sciences-VS (VS)

Courses

VS 313 Prevention and Control of Livestock Diseases Credits: 3 (3-0-0)
Also Offered As: ANEQ 313.
Course Description: Common ailments of livestock; sanitation and disease prevention and control.
Prerequisites: (ANEQ 230 or BMS 300 or ANEQ 305) and (ANEQ 310, may be taken concurrently and ANEQ 320, may be taken concurrently).
Registration Information: Junior or senior standing. Credit not allowed for both VS 313 and ANEQ 313.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

VS 331 Histology Credits: 4 (3-2-0)
Course Description: Analysis of animal cells, tissues, and organs emphasizing light microscopy.
Prerequisite: BMS 300.
Registration Information: Must register for lecture and laboratory. Credit not allowed for both VS 331 and BMS 330. Sections may be offered: Online.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

VS 333 Domestic Animal Anatomy Credits: 4 (3-3-0)
Course Description: Comparative functional anatomy of the dog, horse, and cow.
Prerequisite: BZ 110 or LIFE 102.
Registration Information: Must register for lecture and laboratory. Credit not allowed for both VS 333 and BMS 305. Sections may be offered: Online.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

VS 479 Biology and Behavior of Dogs Credits: 3 (3-0-0)
Also Offered As: BZ 479.
Course Description: Interactions of physiology, neurobiology, and genetics on behavior of domestic dogs, and how evolution and domestication influence behavioral traits.
Prerequisite: LIFE 103 or BZ 110.
Registration Information: Credit not allowed for both VS 479 and BZ 479. Sections may be offered: Online.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

VS 495 Independent Study Credits: Var[1-18]
Course Description:
Prerequisite: None.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 533 Epidemiology of Infectious Diseases/Zoonoses Credits: 3 (2-0-1)
Also Offered As: MIP 533.
Course Description: Epidemiologic features of infectious and parasitic diseases that have a major impact on community medicine.
Prerequisite: MIP 300.
Registration Information: Must register for lecture and recitation. Credit not allowed for both VS 533 and MIP 533.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

VS 562 Applied Data Analysis Credits: 3 (3-0-0)
Course Description: Data management, application and interpretation of statistical analysis, and reporting of results for students in health science fields.
Prerequisite: STAT 301 or STAT 307.
Registration Information: Credit not allowed for VS 562, EDRM 606 and PBHL 560.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

VS 570 Issues in Animal Agriculture Credits: 2 (2-0-0)
Also Offered As: AGRI 570.
Course Description: Issues that have a major impact on the direction of changes in animal agriculture.
Prerequisite: None.
Registration Information: Credit not allowed for both VS 570 and AGRI 570.
Term Offered: Fall (even years).
Grade Mode: Traditional.
Special Course Fee: No.

VS 579 Animal Behavior in Captive Populations Credits: 3 (3-0-0)
Also Offered As: NSCI 579.
Course Description: How animals learn, perceive their world and behave, and how all of those intersect to alter behavior in captive settings.
Prerequisite: BZ 300.
Registration Information: Enrollment in the M.P.N.S., Zoo, Aquarium, and Shelter Management specialization can substitute for BZ 300. Credit not allowed for both VS 579 and NSCI 579.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

VS 602 Critical Evaluation of Scientific Literature Credits: 2 (1-0-1)
Course Description: Method of evaluating scientific literature. Students present critiques of papers they have chosen.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Must register for lecture and recitation.
Term Offered: Fall.
Grade Mode: S/U Sat/Unsat Only.
Special Course Fee: No.

VS 605 Comparative Anesthesiology Credits: 2 (2-0-0)
Course Description: Techniques in anesthesia for large and small animals.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.
VS 606 Comparative Anesthesiology Laboratory Credit: 1 (0-3-0)
Course Description: Techniques in anesthesia for large and small animals.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: None.
Term Offered: Fall (every third year).
Grade Mode: In Instructor Option.
Special Course Fee: No.

VS 612 Plastic and Reconstructive Surgery Credits: 2 (2-0-0)
Course Description: Advances in surgical patient care, surgical instrumentation, and reconstruction.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

VS 613 Plastic and Reconstructive Surgery Laboratory Credit: 1 (0-3-0)
Course Description: Advances in surgical patient care, surgical instrumentation, and reconstruction.
Prerequisite: VM 786B.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

VS 626 Infertility and Genital Disease Credits: 2 (2-0-0)
Course Description: Infectious and noninfectious causes of reproductive failure in food animals.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 628 Physiology and Pathophysiology Credits: 3 (3-0-0)
Course Description: Overview of the normal physiology and pathophysiology of disease states of mammalian organ systems.
Prerequisites: BMS 500 and BMS 501.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree can substitute for BMS 500; BMS 501.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

VS 630 Orthopedic Surgery Credits: 3 (3-0-0)
Course Description: Techniques, devices, and prosthetic materials in rehabilitating musculoskeletal problems.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 631 Orthopedic Surgery Laboratory Credit: 1 (0-3-0)
Course Description: Procedures applied to skeletal preparations and living animals.
Prerequisites: (VM 786A or VM 786B) and (VS 630, may be taken concurrently).
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

VS 642 Ophthalmology Credits: 5 (4-2-0)
Course Description: Instrumentation, ocular therapeutics, and clinical ophthalmology.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Must register for lecture and laboratory.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 645 Surgery of the Eye Credits: 3 (2-3-0)
Course Description: Techniques, indications, and complications.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Must register for lecture and laboratory.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 648 Food Animal Production and Food Safety Credits: 2 (2-0-0)
Also Offered As: VM 648.
Course Description: Basic orientation to food animal production units, herd health concepts, and issues of food safety from preharvest through processing and distribution.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Enrollment in Food Science/Safety Graduate Interdisciplinary Studies program required. Credit not allowed for both VS 648 and VM 648.
Term Offered: Spring.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 650 Comparative Abdominal Surgery Credits: 3 (3-0-0)
Course Description: New techniques in surgery of abdominal viscera.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 651 Comparative Abdominal Surgery Laboratory Credit: 1 (0-3-0)
Course Description: Reparative and reconstructive abdominal surgical procedures.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.
VS 655 Echocardiography in Veterinary Medicine Credits: 3 (2-3-0)
Course Description: Technical proficiency in obtaining echocardiographic images; fundamental understanding of diagnostic criteria for common cardiac disease in dogs and cats.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree required. Must register for lecture and laboratory.
Term Offered: Spring (odd years).
Grade Mode: Traditional.
Special Course Fee: No.

VS 660 Neurology and Neurosurgery Credits: 3 (3-0-0)
Course Description: Diagnostic and surgical techniques for the nervous system.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 661 Neurology and Neurosurgery Laboratory Credit: 1 (0-3-0)
Course Description: Production and correction of surgically amenable lesions in central and peripheral nervous system; electrodiagnosis.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree required.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 673 Thoracic and Cardiovascular Surgery Credits: 3 (3-0-0)
Course Description: Surgical approaches to the thorax and the central and peripheral cardiovascular system.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: DVM degree or equivalent professional medicine degree required.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 674 Thoracic and Cardiovascular Surgery Laboratory Credit: 1 (0-3-0)
Course Description: Surgical procedures applied to the chest, heart, and vessels.
Prerequisites: (VM 786A or VM 786B) and (VS 673, may be taken concurrently).
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 699 Thesis Credits: Var[1-18]
Course Description: 
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 701 Postgraduate Medicine I Credits: Var[1-3]
Course Description: Comprehensive review, update of immunology, emergency medicine, dermatology, and endocrinology.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 702 Postgraduate Medicine II Credits: Var[1-3]
Course Description: Comprehensive review, update of neurology, gastroenterology, and ophthalmology.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 703 Postgraduate Medicine III Credits: Var[1-3]
Course Description: Comprehensive review, update of oncology, cardiology, reproduction, ophthalmology, and radiology.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Fall (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 704 Postgraduate Medicine IV Credits: Var[1-3]
Course Description: Comprehensive review, update of hematology, nephrology, urology, respiratory, hepatic, and pancreatic.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Spring (every third year).
Grade Mode: Traditional.
Special Course Fee: No.

VS 716 Advanced Studies in Reproduction Credits: 2 (2-0-0)
Course Description: Biochemical and physiological basis for problems in reproduction.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

VS 718 Cancer Biology Clinical Practicum Credits: 2 (0-0-4)
Course Description: Exposes graduate students engaged in laboratory cancer research to cancer from a clinical perspective, through VTH clinical rotations.
Prerequisite: ERHS 510.
Term Offered: Summer.
Grade Mode: Traditional.
Special Course Fee: No.

VS 733 Advanced Veterinary Epidemiology Credits: 4 (4-0-0)
Course Description: Advanced epidemiological and statistical techniques for the design and analysis of research projects.
Prerequisites: (ERHS 532) and (ERHS 542 or ERHS 544 or STAT 511 or STAT 512 or VS 662).
Term Offered: Spring (odd years).
Grade Mode: Traditional.
Special Course Fee: No.
VS 750 Clinical and Applied Pharmacology Credits: 2 (2-0-0)
Course Description: Factors involved in drug dosing and variability of drug response. Applications in veterinary and human medicine.
Prerequisite: BMS 450.
Registration Information: DVM degree or equivalent professional medicine degree can substitute for BMS 450.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.
VS 784 Supervised College Teaching Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 792 Seminar Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795A Independent Study: Small Animal Medicine Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795B Independent Study: Large Animal Medicine Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795C Independent Study: Small Animal Surgery Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795D Independent Study: Equine Surgery Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795E Independent Study: Equine Orthopedics Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795F Independent Study: Large Animal Reproduction Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795G Independent Study: Neurology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795H Independent Study: Cardiology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795I Independent Study: Neurology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795J Independent Study: Dermatology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795K Independent Study: Ophthalmology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795L Independent Study: Ophthalmology Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.
VS 795O  Independent Study: Herd Health Management  Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 795P  Independent Study: Equine Lameness  Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 795S  Independent Study: Epidemiology  Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 795T  Independent Study: Human-Animal Bond  Credits: Var[1-5]
Course Description:
Prerequisite: None.
Restriction: None.
Registration Information: Maximum of 5 credits allowed in course.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 796  Group Study-Medicine  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 798  Research  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

VS 799  Dissertation  Credits: Var[1-18]
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.