

2007-09 Cal Poly Catalog

[Animal Science Department](#)

VS–VETERINARY SCIENCE

VS 200 Special Problems for Undergraduates (2–3) (CR/NC)

Individual investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 3 units per quarter. Credit/No Credit grading only. Prerequisite: Consent of instructor.

VS 203 Animal Parasitology (3) (Also listed as ASCI 203)

Identification, life cycles, prevention and control of the common external and internal parasites causing economic loss in livestock. 3 lectures. Prerequisite: BIO 111 or BIO 161.

VS 229 Anatomy and Physiology of Farm Animals (4) (Also listed as ASCI 229) (formerly VS 223)

Comprehensive overview of the principal systems of farm animals using an integrative, systemic approach to learning the homeostasis of mammalian organisms so the information can be applied to their daily care and management. 3 lectures, 1 laboratory. Prerequisite: BIO 111 or BIO 161.

VS 310 Technical Veterinary Skills (4) (Also listed as ASCI 310)

Restraint and handling of animals, physical examination, necropsy procedure, basic wound management, applied pharmacology. Reproduction and herd health programs. 3 lectures, 1 laboratory. Prerequisite: VS/ASCI 229.

VS 312 Production Medicine (3) (Also listed as ASCI 312)

Basic disease concepts. Fundamentals of immunology and therapeutics. Disease prevention principles, infectious and non-infectious. Pre-harvest food safety and milk and meat quality assurance. Herd health management programs for production efficiency and product quality. 3 lectures. Prerequisite: ASCI 221 or ASCI 223; PM/ASCI 225 or ASCI 222; ASCI 224 or ASCI 227; and VS/ASCI 229.

VS 321 Zoonoses and Veterinary Public Health Concerns (4) (Also listed as ASCI 321) (formerly VS 320)

Public health concerns including: animal and bird diseases which may be transmitted to people; pre-harvest food safety and handling concerns; and environmental public health hazards. 3 lectures, 1 activity. Prerequisite: BIO 111 or BIO 161.

VS 400 Special Problems for Advanced Undergraduates (2–4) (CR/NC)

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units, with a maximum of 4 units per quarter. Credit/No Credit grading only. Prerequisite: Consent of instructor.

VS 438 Systemic Animal Physiology (4) (Also listed as ASCI 438)

Homeostatic relationships of organ systems. Cardiovascular, respiratory, urogenital and neuro-endocrinological functions. 3 lectures, 1 laboratory. Prerequisite: VS/ASCI 229, CHEM 313 or CHEM 371, or ASCI 320.

VS 440 Immunology and Diseases of Animals (4) (Also listed as ASCI 440)

Introduction to immune system, including innate and acquired immunity of domesticated animals. Application of immunological analyses and examination of current disease issues in domesticated animals. 3 lectures, 1 laboratory. Prerequisite: VS/ASCI 229. Recommended: ASCI 320, CHEM 371 or equivalent.

VS 540 Advanced Immunology and Diseases of Animals (4) (Also listed as ASCI 540)

In-depth analysis of the immune system, including molecular basis for immunity of domesticated animals. Application of immunological assays, and application of scientific method to examine immunity and disease in domesticated animals. Not open to students with credit in VS 440. 3 lectures, 1 laboratory. Prerequisite: VS/ASCI 229; ASCI 320 or CHEM

371 or equivalent; STAT 218 or equivalent; or consent of instructor. Corequisite: VS/ASCI 541.

VS 541 Advanced Animal Immunology Laboratory (1) (Also listed as ASCI 541)

Laboratory complement to VS 540. Independent research projects, including hypothesis development, experimental design, data collection and analyses, and written and oral presentations. 1 laboratory. Corequisite: VS/ASCI 540.