

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
VET 132 - CLINICAL PATHOLOGY II (3 CR.)**

Course Description

Surveys techniques used in the veterinary hospital laboratory. Includes microbiology, immunology, clinical chemistry, and serology. Emphasizes the use of microscope, automated laboratory equipment, and modern diagnostic procedures. Part II of III. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose

This course is designed to provide the veterinary technology student with basic knowledge and skill in the area of veterinary immunology, serology, clinical chemistry, microbiology and mycology as applicable in routine veterinary clinical practice.

Course Prerequisites/Corequisites

Prerequisites: VET 131. Enrollment is limited to those students program-placed in the veterinary technology curriculum or those students with special approval from the program head.

Course Objectives

Upon completion of this course, the student will be able to:

- Describe the management and maintenance of the veterinary hospital laboratory
- Explain the basic principles of the immune system including anatomy, physiology and pathology
- Explain serological principles utilized as diagnostic methods in veterinary medicine including ELISA and RIA
- Perform serological techniques using in-hospital test kits currently available
- Describe special procedures for collection, storage and shipment of serological samples
- Explain the principles of clinical chemistry testing involving colorimetry and photometry
- Perform common tests used to evaluate organs employing function tests and enzymology
- Adequately operate various types of clinical chemistry instruments and demonstrate the routine care of the instruments

Major Topics To Be Covered

- Management of veterinary clinic laboratory, economics, ethics, quality control, cleanliness and orderliness
- Principles of testing used in veterinary immunology and clinical chemistry
- Principles of testing used in veterinary serology
- Procurement, storage and shipment of diagnostic samples
- Principles of testing used in veterinary microbiology
- Principle of testing used in veterinary mycology

Additional Topics

Review of veterinary medical terminology and physiology of organ systems being evaluated