

VET-246-VET CLINICAL PATHOLOGY III 2 CREDITS

SYLLABUS

CATALOG DESCRIPTION

An advanced course designed to build upon and review the material covered in Veterinary Clinical Pathology 1 and 2. This course focuses on building and expanding the student's knowledge base on topics covered in the Veterinary Clinical Pathology 1 and 2 with an emphasis on teaching advanced and in- depth hematological procedures, blood and urine lab tests, diagnostic microbiology, clinical chemistries, cytological evaluations. Parasitology, and necropsy techniques. Advanced knowledge and skills in veterinary clinical pathology will be honed through intense clinical assignments and will build upon knowledge learned from previous courses.

Prerequisites: Student must have clinical site and preceptor approved. Faculty permission required.

Semester Offered: All

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Perform a complete urinalysis including gross examination, chemical and microscopic examination.
2. Perform blood chemistry testing analysis to include performing these tests on blood analyzers.
3. Perform microbiological procedures and identification of common bacteria.
4. Perform cytological procedures and identification of common cells seen in cancer and fluids such as transudates and exudates.
5. Demonstrate making blood smears and performing WBC differentials, and WBC corrections.
6. Calculate RBC indices.
7. Perform serological tests.

Specific Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Perform urinalysis.
 - a. Determine physical properties.
 - b. Color, clarity, specific gravity, refractometer.
 - c. Test chemical properties using dipstick.
 - d. Examine and identify sediment.
2. Perform hematologic evaluations.
 - a. Collect samples for procedures.
 - b. Perform CBC, platelet count.
 - c. Calculate hematologic indices.
3. Perform blood chemistry tests.
4. Perform serological tests.
 - a. Collect and prepare serum sample.
 - b. Perform tests using ELISA methodology, slide/card agglutinations.
5. Perform microbiological procedures a. Collect representative samples.
6. Perform bacteriologic procedures
7. Culture bacteria and perform sensitivity tests
 - a. Identify common animal pathogens
 - b. Perform common biochemical tests
 - c. Perform staining procedures
 - d. Culture and identify common dermatophytes
8. Perform cytologic procedures a. Collect, prepare, evaluate canine vaginal smears
9. Prepare laboratory samples for shipment.
10. Maintain laboratory equipment.
11. Perform quality control procedures.