

# VETT-117-VET CLINICAL PATHOLOGY | 2 CREDITS

## **SYLLABUS**

### CATALOG DESCRIPTION

An entry-level course designed to develop the student's knowledge and skills in basic laboratory techniques. Detailed overview and hands on clinical experience will include the areas of basic urinalysis, identification of common blood, internal, and external parasites, hematological evaluations, and veterinary microbiology. This course will act as a foundation of learning for subsequent courses in Clinical Pathology. Please realize that you will not be able to learn every parasite you read about or identify as there are hundreds. As you proceed through Tier 2 and 3 Clinical Pathology Courses and work at a Veterinary Clinic, then you begin to understand the identification process.

Prerequisites: None

Semester Offered: All



#### **Course Learning Outcomes**

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

- 1. List the safety rights and responsibilities of employees in the workplace.
- 2. List the common workplace hazards in the veterinary facility and personal protection equipment (PPE) required for safety.
- 3. Understand basic components of a RBC and WBC count evaluations and perform calculations on RBC indices.
- 4. Describe basic principles of parasitology (internal and external) and identify common parasites seen in small animals.
- 5. Learn the basic principles of a urinalysis and identify cells and constituents found in urine microscopically.
- 6. Describe techniques used to identify common bacterial pathogens.
- 7. Describe cytological techniques used in the veterinary facility.

### **Specific Learning Outcomes**

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

- 1. Describe proper collection techniques, handling of blood samples, and components of a complete blood count (CBC).
- 2. Compare and contrast procedures used to determine red blood cell mass (packed cell volume)-PCV, hematocrit, hemoglobin, and RBC counts.
- 3. Describe the technique for preparing a blood smear and performing a white blood cell differential.
- 4. Learn the basic principles of regarding coagulation testing.
- 5. Understand why parasitology identification and techniques are important in the veterinary facility.
- 6. Understand the basic principles of the urinalysis, microbiology, and cytology and its importance in veterinary medicine.