



Course Description

ATE2639L | Animal Lab Procedures 2 Laboratory | 2.00 credits

This course provides experience in the practical applications discussed in Animal Laboratory procedures 2. It also will include principles of serological testing and microbiological methods and protocols as well as dentistry for the veterinary technician. Prerequisites: ATE2638, 2638L; corequisite: ATE2639.

Course Competencies:

Competency 1: The student will demonstrate an understanding of the principles of clinical chemistry laboratory procedures by:

1. Identifying the various chemistry analyzers and their principle of operation
2. Obtaining and handling lab samples appropriately
3. Discerning the differences in the use of plasma, serum, and whole blood
4. Discussing how lipemia and hemolysis affect clinical chemistries
5. Recognizing and performing available diagnostic tests for organ function investigation
6. Displaying the use of serologic test kits available in veterinary clinical lab

Competency 2: The student will become acquainted with laboratory practices in microbiology by:

1. Demonstrating proper sample for microbiology sample preparation
2. Determining the correct and incorrect methods of obtaining samples for the microbiology lab
3. Demonstrating the principles in which culture and sensitivity studies are used
4. Recognizing various unique culture media characteristics used in aerobic, anaerobic, fungal, viral and memorable studies

Competency 3: The student will be able to identify and describe laboratory procedures associated with performing a urinalysis by:

1. Identifying and using laboratory equipment associated with performing a urinalysis
2. Handling urine samples using proper quality control measures necessary to obtain accurate urinalysis results
3. Performing a complete urinalysis and recording results accurately

Competency 4: The student will be to identify various laboratory methods used in assessing cytology in a veterinary laboratory by:

1. Setting up and reading an ear cytology sample, identifying the various elements, and recording them accurately
2. Identifying the stages of estrus and the elements associated with the various stages
3. Identifying characteristics of bone marrow macroscopically and microscopically

Competency 5: The student will be able to discuss and identify ectopic parasites by:

1. Detecting genus and species of the various ectopic parasites seen in dogs and cats
2. Detecting what supplies are needed to perform tests associated with the identification of ectoparasites
3. Describing how to perform tests associated with identifying the various ectoparasites
4. Discussing microscopic objectives used in the identification of parasites
5. Detecting the various treatments used to treat the various ectoparasites

Learning Outcomes;

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning