



## **Course Description**

### **ATE2611 | Animal Medicine 1 | 3.00 credits**

This course is designed to acquaint the student with anesthesiology, asepsis and general surgical nursing care, essentials in pharmacy and pharmacology, and concepts in microbiology, virology and immunology.

Prerequisites: ATE1110, 1211; corequisites: ATE2661, 2942, 2631, 2655L.

## **Course Competencies:**

**Competency 1:** The student will demonstrate an understanding of anesthetic pharmacology by:

1. Identifying drugs commonly used in minor animal anesthetic procedures (sedatives, tranquilizers, induction and maintenance)
2. Showing knowledge of drug classes
3. Showing knowledge of specific indications of the use of various anesthetic drugs
4. Showing knowledge of drug side effects and contraindications
5. Showing knowledge of the routes of administration
6. Showing knowledge of various anesthetic gases, indications, and side effects. Identify drugs commonly used for pocket pets and exotics

**Competency 2:** The student will demonstrate knowledge of patient care during anesthetic procedures by:

1. Showing knowledge of pre-, peri and post-op care
2. Showing knowledge of the stages of anesthesia
3. Showing knowledge of patient risks of anesthesia
4. Showing knowledge of patient preparation for anesthesia
5. Showing knowledge of laboratory tests used to assess patients for anesthesia and the information obtained from those tests

**Competency 3:** The student will demonstrate knowledge of the anesthesia machine and monitoring equipment by:

1. Identifying components of the anesthesia machine and their function
2. Obtaining information from various monitoring equipment used in a veterinary hospital
3. Applying monitoring procedures using monitoring equipment
4. Monitoring patients without the use of anesthesia monitoring equipment
5. Interpreting data obtained from monitoring
6. Addressing abnormal values
7. Analyzing the pathophysiology of abnormal values

**Competency 4:** The student will demonstrate the ability to discuss intubation procedures by:

1. Showing knowledge of the different types of endotracheal tubes
2. Showing knowledge of proper placement of the endotracheal tube
3. Showing knowledge of complications involving the endotracheal tube
4. Showing knowledge of how to inflate and deflate the cuff

**Competency 5:** The student will demonstrate knowledge of ECG by:

1. Describing the anatomy and physiology of cardiac rhythm
2. Describing a normal rhythm
3. Describing the various arrhythmias
4. Describing the role the ECG plays in monitoring the anesthetic or nursing care patient
5. Describing the clinical signs of a patient with significant arrhythmia
6. Describing drugs used to control arrhythmias and administration of drugs

**Competency 6:** The student will demonstrate knowledge of the role of fluid therapy for the anesthesia patient by:

1. Describing fluid rates for anesthesia patients
2. Describing fluid types used for the anesthetic patient
3. Describing the role of fluid therapy for hypotension in the anesthesia patient

**Competency 7:** The student will demonstrate knowledge of drugs used in Cardiac Arrest by:

1. Describing drug classes and names of drugs used during CPR
2. Describing indications and side effects

**Competency 8:** The student will demonstrate knowledge of pain management in the canine and feline by:

1. Describing terminology associated with pain
2. Describing various drug classes and drug types used for pain management in small animal medicine
3. Describing behavioral and physiological signs of pain
4. Describing the pain assessment
5. Describing the pain score chart and its use
6. Describing the theory of preemptive analgesia

**Competency 9:** The student will demonstrate knowledge of standard surgical procedures, post-op nursing care, and client instructions by:

1. Describing the OHE
2. Describing castration
3. Describing laparotomy
4. Describing thoracotomy
5. Describing cystotomy
6. Describing orthopedic procedures

**Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Formulate strategies to locate, evaluate, and apply information