

**Veterinary Science
Course Competency Profile**

1. Introduction
 - 1.1. Explore and list employment opportunities in veterinary science.
 - 1.2. Identify education and training requirements for careers in veterinary medicine.

2. Comparative Anatomy and Physiology
 - 2.1. Explain and identify the form and function of cells.
 - 2.2. Explain and identify the form and function of tissues.
 - 2.3. Explain and identify the form and function of the major body systems.
 - 2.4. Analyze the interaction of the major body systems.

3. Nutrition
 - 3.1. Use appropriate/reputable resource to locate animal nutritional requirements based on species, age, and use.
 - 3.2. Balance an animal feed ration.
 - 3.3. Develop a feeding plan that is specific to species, age, and use.

4. Disease Classification
 - 4.1. List and explain major disease agents and their methods of transmission.
 - 4.2. Classify disease, grouping them according to general characteristic symptoms.
 - 4.3. List and describe diseases that are common to domestic animals that are contagious to humans.

5. Diagnosis
 - 5.1. Determine historical information pertinent to the animal's condition.
 - 5.2. Perform a physical exam.
 - 5.3. Determine which lab tests are needed to make a diagnosis based on the animal's symptoms.
 - 5.4. Demonstrate an understanding of basic functions of common diagnostic procedures.
 - 5.5. Analyze the informatic differences between radiograph and ultrasound.

6. Disease Prevention
 - 6.1. List basic components of disease prevention.
 - 6.2. Describe types of vaccines and their role in disease prevention.
 - 6.3. List and define components of environmental management and protocol, including: aseptic technique, disinfectants, sterilization, autoclaving, and antiseptics.

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7. Selection and Breeding
 - 7.1. Describe how genetics are used to improve animal species.
 - 7.2. Explain the advantages of various breeding methods.

8. Euthanasia
 - 8.1. Consider necessary factors and appropriate methods in making informed decisions regarding euthanasia of animals.
 - 8.2. Contrast the decision-making process regarding euthanasia in companion animals versus production animals.

9. Veterinary Equipment and Instrumentation
 - 9.1. Identify and explain the use of essential veterinary instruments and equipment.
 - 9.2. Identify and explain supplies necessary for a first aid kit.

10. Business and Office Practices
 - 10.1 Describe basic concepts of record keeping and protection of medical and business records.
 - 10.2 Distinguish appropriate and inappropriate interactions with clients and colleagues.
 - 10.3 Describe a pleasing telephone personality and demonstrate how to handle the types of calls commonly received in an animal hospital.
 - 10.4 Identify ethical rules of conduct for veterinarians and members of the veterinarian staff.

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