

# Veterinary Anatomy and Physiology

## Class

VTHT 1413

Gross anatomy of domestic animals including physiological explanations of how each organ system functions. Three hours lecture and three hours lab per week.

## Honor Code

Students must abide by the Weatherford College Academic Honor Code (Honesty.) See college catalog.

## Tasks

- A. Properly use directional terms appropriate to veterinary species. (C1,C5,C6,C11,C12,C13,F1,F2, F4,F10, F11,F12,F14)
  1. Describe relative position of labels on anatomic specimens.
  2. Describe position of body surfaces, organs and structures relative to one another.
  3. Discuss importance of using correct directional terminology.
- B. Describe the basic structure & function of mammalian cells. (C5,C11,C12,F1,F2,F10, F11)
  1. Identify cellular organelles in diagrams and models.
  2. Describe function of cellular organelles.
  3. Describe the function and basic structure of the cell membrane.
  4. Demonstrate an understanding of cell diversity.
- C. Describe the organization of animal cells into tissues, organs and systems. (C5, C11, C12, C13,C19,C20,F1, F2, F4, F10, F11)
  1. Describe the features which define a tissue.
  2. Describe the characteristics of epithelial, connective, muscular and nervous tissue.
  3. Identify examples of each class of tissue.
  4. Identify types and subtypes of tissue on microscopic slides and photographs.
  5. Describe the feature which define an organ.
  6. Describe the organization of organs into organ systems.
  7. Identify the major organ systems of the mammalian body.
- D. Describe the anatomy of major body systems. (C1,C5,C10,C11,C12,C13,C18, C19, C20, F1, F2, F4, F10, F11, F14)
  1. Describe the anatomy of the nervous, skeletal, articular, digestive, respiratory, urinary, integumentary, circulatory, endocrine and reproductive systems.
  2. Identify major structures of the above systems using preserved specimens, cadavers, models, photographs and diagrams.
  3. Identify features of cells and tissues of selected systems.
- E. Describe the function of major body systems (C11,C12,C13,F1,F2,F10,F11)
  1. Describe the function of the nervous, skeletal, articular, digestive, respiratory, urinary, integumentary, circulatory, endocrine and reproductive systems.
  2. Explain how the parts work together to accomplish the relevant functions.
  3. Explain and describe relevant physiological process that contribute to the system's function.
- F. Relate structure to function in all systems studied. (C11,C12,C13,F1,F2,F6,F10,F11)
  1. Describe how an organ's anatomic structure allows and enhances its function.
  2. Demonstrate knowledge of conditions in which variations in structure relate to varying functional needs.
- G. Compare and contrast anatomy a physiology of domestic species studied. (C11,C12,C13,F1,F2,F6,F10,F11)
  1. Identify variations between species in all body systems studied.
  2. Evaluate the functional significance of such variations.
  3. Relate the variations between species to features of each species such as mobility, diet, lifestyle and geographic origin.

## Competencies

- A. Properly use directional terms appropriate to veterinary species
- B. Describe the basic structure & function of mammalian cells
- C. Describe the organization of animal cells into tissues, organs and systems
- D. Describe the anatomy of major body systems.
- E. Describe the function of major body systems.
- F. Relate structure to function in all systems studied.
- G. Compare and contrast anatomy a physiology of domestic species studied.

### **Required Textbooks**

Laboratory Manual for Comparative Veterinary Anatomy and Physiology, Cochran.

### **Instructional Methods**

The course will consist of three hours lecture and three hours laboratory weekly. Slides and anatomic specimens will be used to aid in visualization of anatomic structures. Laboratory periods will include study of prepared specimens and may include student dissection of animal cadavers

Grades will be based on the following

6 quizzes at 25 points each 150 pts.  
Lab Participation/Attendance 50 pts  
Final exam 100 pts

Exams and quizzes will include multiple choice, True/False, short answer and short essay questions.

The grading scale is as follows

90-100 % A  
80- 90 % B  
70-80 % C  
60-70 % D  
below 60% F

### **Disabilities**

#### **ADA Statement:**

Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone:* 817-598-6350  
*Office Location:* Office Number 118 in the Student Services Building, upper floor. *Physical Address:* Weatherford College 225 College Park Drive Weatherford, TX.

### **Academic Integrity**

Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

### **SCANS**

The Secretary's Commission on Achieving Necessary Skills (SCANS) identified competencies in the areas of Resources, Interpersonal, Information, Systems and Technology, and foundation skills in the areas of Basic Skills, Thinking Skills, and Personal Qualities. This Course is part of a program in which each of these competencies and skills are integrated. The specific SCANS competencies that are recognized throughout this course are noted at the end of the appropriate competencies or task listed.