

Course discipline/number/title: VT 2020: Comparative Veterinary Anatomy and Physiology

A. CATALOG DESCRIPTION

1. Credits: 2
2. Hours/Week: 1 lecture, 2 lab
3. Prerequisites (Course discipline/number): Grade of C or better in Math 1026
4. Other requirements: Admission into the Veterinary Technician Program
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course provides additional detail in anatomy and physiology of companion and farm animal species. Focuses are on the anatomical structures, and basic physiological body function differences between selected species. Additional topics include the interrelationships between body systems such as respiratory, cardiovascular, urogenital, endocrine, digestive, nervous and reproductive systems. Other subjects include organs of special sense anatomy and anatomy and physiology of bones, muscles, and skin, metabolism and digestion, acid-base balance, endocrinology, and reproductive endocrinology and unique characteristics of common domestic species. Lab includes skeletons and cadaver specimens. Attendance is required for successful completion of the course. Grade of C or better in MATH 1026 and Admission into the Veterinary Technician Program.

C. DATE LAST REVISED (Month, year): February, 2021

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Cell structure and physiology
2. Tissues
3. Body systems

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Identify the structural and functional characteristics of the four primary body tissues and their subtypes.
2. Perfect skills learned and introduced in VT 1010.
3. Compare and contrast the structure and function of body systems for all domestic animals.
4. Perform dissection and comparative anatomy techniques of the different species of animals.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING. Methods may include any of the following:

1. Quizzes
2. Objective and/or subjective tests
3. Laboratory practical tests
4. Course assignments
5. Essays
6. Group work/projects

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

I. SPECIAL INFORMATION (if any):

The initial lab session explains and familiarizes the student with general safety hazards and safety equipment to the lab. During the pre-lab discussion, the hazardous characteristics of any materials used during a lab are discussed. In addition, if the lab involves any potentially infectious or zoonotic material, the students will be instructed on the proper use and disposal. The instructor will direct all students to where necessary protective equipment while working with any hazardous chemicals. A copy of Material Safety Data Sheets for chemicals used is available in the lab.