

**Common Course Outline**  
**VETT 109**  
**Veterinary Anatomy and Physiology**  
**5 Credits**

**The Community College of Baltimore County**

**Description**

**VETT 109 – 5 credits- Veterinary Anatomy and Physiology** introduces the concept of normal structure and function of the animal body. Species studied will include the dog, cat, horse, cow, sheep, goat, and pig. The course will integrate the comparison of the gross anatomy of domestic animals, common diseases affecting each system and organ, and the application to clinical situations. The course has a laboratory component, using models, illustrations, demonstrations, and computer-assisted learning.

**5 credits; 4 hours of lecture and 2 hours of laboratory**

**Prerequisite: Admission into Veterinary Technology Program; this course may not be offered in all semesters, see registration schedule**

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. list the four basic tissues of the body; describe where they are found, their function and structure;
2. identify and describe the structure and functional features of the integumentary system including the integument and related accessory structures;
3. identify and describe the structure and functional features of the skeletal system including osteogenesis, mineral homeostasis, and body movement;
4. identify and describe the structural features of the muscular system and explain the functional roles of muscle in movement and thermogenesis;
5. identify and describe the components of the cardiovascular system, including blood, the heart and vessels and explain their functional roles in hemodynamics;
6. identify and describe the structural features of the lymphatic system and explain their functional roles in immunity and fluid homeostasis;
7. identify and describe the structural features of the respiratory system and explain their functional roles in ventilation, external and internal respiration, and buffering;
8. identify and describe the structural features of the digestive system and explain their functional roles in digestion, absorption, and excretion;
9. describe the catabolism and anabolism of carbohydrates, lipids, and proteins;
10. identify and describe the structural features of the nervous system and explain their functional roles in receiving, integrating and conducting information;
11. identify and describe the structural features of the endocrine system and explain the function of endocrine glands, their hormones, and effectors;

12. identify and describe the structural features of the urinary system and explain their functional roles in urinary formation, excretion, and regulation of body fluid volume;
13. identify and describe the structural features of the male and female reproductive systems and explain their functional roles in reproduction and inheritance;
14. identify the structural and functional features of avian, amphibian, and reptilian systems and explain the features unique to each species; and
15. identify and describe the structural and functional features of the special senses, gustation, olfaction, vision, audition, and equilibrium.

### **Major Topics**

- I. Tissues
- II. Integumentary System
- III. Skeletal System
- IV. Muscular System
- V. Cardiovascular System
- VI. Digestive System
- VII. Nervous System
- VIII. Special Senses
- IX. Endocrine System
- X. Urinary System
- XI. Reproductive System
- XII. Avian, Amphibian, and Reptilian Anatomy and Physiology

### **Course Requirements**

Students are required to utilize appropriate academic resources.

Specific assignments and grading procedures will be described in the individual course syllabus.

A research paper will be assigned to each student; the student will choose from a list of topics that integrates course subject material.

**Grading/exams:** Grading procedures will be determined by the individual faculty members but will include the following:

Grading procedures will include a minimum of three lecture examinations (including a comprehensive final) and two laboratory practicals. Students must pass both the lecture and laboratory assessments in the course with a minimum grade of 70 percent.

### **Other Course Information**

This course is a required course in the Veterinary Technology Program.