



Course Number and Title: VET 110 Veterinary Anatomy & Physiology II

Campus Location:

Georgetown

Effective Date:

2018-51

Prerequisite:

VET 101, VET 102, VET 120, SSC 100 or concurrent

Co-Requisites:

none

Course Credits and Hours:

3.00 credits

2.00 lecture hours/week

4.00 lab hours/week

Course Description:

This course, the second of two courses, provides a broad foundation in the structure and function of domesticated animals using a body system approach. Emphasis is on the connection between the study of anatomy and physiology and clinical veterinary medical and surgical nursing. Body systems covered include neuroendocrine, urogenital, associated digestive, ruminant digestive, and special senses. Coordinated laboratory includes videos, models, radiographs, and preserved specimens.

Required Text(s):

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:

Dissection kit (optional), safety goggles, and lab coat

Schedule Type:

Classroom Course

Disclaimer:

Group dissection includes preserved cats.

Core Course Performance Objectives (CCPOs):

1. Analyze and compare the components, organization, and function of the different body systems of domesticated animals. (CCC 5, 6; PGC 1)
2. Adhere to the professional behavior and ethics as outlined in the Veterinary Technician Code of Ethics. (CCC 3, 4; PGC 3)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Analyze and compare the components, organization, and function of the different body systems of domesticated animals.
 1. Describe the anatomical and physiological perspectives of the nervous system.
 2. Discuss the components of a neurological examination in the dog and how it relates to nervous system function.
 3. Compare and contrast the parasympathetic and sympathetic nervous system, and identify drugs and toxins that influence these systems.
 4. List the 12 cranial nerves, and discuss the function of each.
 5. Identify organs associated with the endocrine system.
 6. Differentiate the role of an enzyme and a hormone.
 7. Discuss the hypothalamic-pituitary axis as it applies to the endocrine system.
 8. Illustrate negative feedback loops associated with the adrenal gland, ovary/testes, and thyroid gland.
 9. Discuss common endocrinopathies in companion animals, including Addison's disease, Cushing's disease, and thyroid disease.
10. Describe the anatomical and physiological perspectives of the liver, pancreas, salivary glands, gall bladder, and other associated digestive structures/organs.
11. Illustrate the microanatomy of the liver, including the portal triad.
12. Discuss first-pass effect as it applies to oral administration of drugs.
13. Describe the interconnection among the liver, gall bladder, and pancreas in triad disease in the cat.
14. Identify the four components of the ruminant stomach, and discuss common diseases associated with each.
15. Discuss the process of rumination.
16. Describe the anatomical and physiological perspectives of the urinary system.
17. Discuss the process of filtration, diffusion, tubule reabsorption, and tubule secretion.
18. Identify common crystals and casts found in the urine of dogs and cats.
19. Describe the anatomical and physiological perspectives of the ear of the dog and cat.
20. Describe the anatomical and physiological perspectives of the eye of common domesticated species.
21. Identify organs and structures using anatomical models, radiographs, and preserved specimens.
2. Adhere to professional behavior and ethical conduct as outlined in the Veterinary Technician Code of Ethics.
 1. Work effectively in groups of people from diverse backgrounds and beliefs.
 2. Demonstrate ethical and professional conduct.

Evaluation Criteria/Policies:

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Apply theoretical information that leads to appropriate action in the application or delivery of veterinary nursing procedures.
2. Competently perform a full range of veterinary nursing procedures used in small and large animal medicine.
3. Practice behaviors that are consistent with the Veterinary Technology Code of Ethics and employer expectations/requirements.

Disabilities Support Statement:

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.