

Course Number and Title: VET 102 Veterinary Anatomy & Physiology I

Campus Location:

Georgetown

Effective Date:

2022-51

Prerequisite:

(BIO 140 or BIO 150), (CHM 100 or CHM 110), BIO 100, (MAT 162 or higher), 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 first 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 integumentary, musculoskeletal, respiratory, monogastric digestive, and cardiovascular. Coordinated laboratory includes dissection videos/tutorials, 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. Compare the anatomical and physiological adaptations and body systems of reptiles and avian species to domesticated animals. (CCC 5, 6; PGC 1)
3. 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 integumentary system, including the mammary gland of dairy cows and the equine hoof.
 2. Describe the anatomical and physiological perspectives of the musculoskeletal system emphasizing the connection with equine and canine orthopedic diseases/injuries.
 3. Discuss the process of wound and fracture healing.
 4. Compare the anatomical and physiological perspectives of the cardiovascular system emphasizing the connection with canine, feline, ruminant, and equine heart disease.
 5. Define *electrocardiogram* (ECG), *echocardiogram*, and *auscultation*, and discuss the application of each diagnostic modality in veterinary medicine.
 6. Identify the P, QRS, and T wave on an ECG.
 7. Describe the anatomical and physiological perspectives of the upper and lower respiratory system, including the guttural pouch in horses.
 8. Discuss how capillary refill time (CRT), pulse oximetry, capnography, and arterial blood gas are used in accessing ventilation and perfusion.
 9. Compare and contrast the monogastric digestive system of the carnivore, equine, and porcine.
 10. Identify organs and structures using anatomical models, radiographs, and preserved specimens.
2. Compare the anatomical and physiological adaptations and body systems of reptiles and avian species to domesticated animals.
 1. Describe the unique anatomical and physiological adaptations of the reptile and of the avian.
3. 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:

The grade will be determined using the Delaware Tech grading system:

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
0	-	69	=	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.

Final Course Grade:

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Formative: Assignments	5%
Formative: Quizzes	10%
Summative: Professional Behavior Evaluation	5%
Summative: Written Examinations	40%
Summative: Laboratory Practical Examinations	40%
TOTAL	100%

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.