



# CAREER PATHWAYS FOR SUCCESS

A DUAL ENROLLMENT CAREER PATHWAY FOR VETERINARY TECHNOLOGY

## 12<sup>th</sup> Grade:

FALL      SPRING

• ENG 101    • BIO 101

• ENG 102\*   • MAT 120

\*Optional, but needed to complete 4-year B.S. degree.

• ADDITIONAL COURSES  
SPC 205, PSY 201, Humanities Requirement

**High School Graduation**  
WITH 13 OR MORE HOURS COLLEGE CREDIT AND COMPLETION OF PRE-VETERINARY TECHNOLOGY CURRICULUM

- VET 103
- VET 105

VET 250  
VET 201  
VET 270  
PSY 201  
SPC 205

• VET 170

• VET 140  
• VET 142  
• VET 152

• VET 150  
• VET 101  
• VET 104  
• VET 116  
• BIO 225

VET 215  
VET 260  
VET 240  
VET 280  
Humanities Requirement

## VETERINARY TECHNOLOGY ASSOCIATE DEGREE

### EXIT NOW

Local Annual
ENTRY-LEVEL
\$20,000
MEDIAN
\$29,000
National
MEDIAN
\$30,290

- Bachelor of Science 2+2 Pathways with 4-year universities

**ANIMAL & VETERINARY SCIENCES, EQUINE BUSINESS or ANIMAL AGRIBUSINESS CONCENTRATION**  
Bachelor of Science Degree  
Clemson University

**VETERINARY TECHNOLOGY Bachelor of Science Degree**  
Murray State University (KY)  
Lincoln Memorial University (TN)

## Graduate from High School with 13 Hours of College Credit

- Take your dual enrollment courses at one of TCTC's campuses alongside college students.
- Get a head start on your Veterinary Technology program by completing all Veterinary Technology prerequisites while still in high school.
- Complete VET 103 and VET 105 in summer term evening classes and be ready to begin Veterinary Technology courses in the fall.
- Upon completion of the Veterinary Technology program, become a Licensed Veterinary Technician (LVT) after passing the state and national licensing exams.
- As an LVT, qualify for employment with veterinary hospitals, major teaching facilities, zoos, wildlife preserves, animal research and diagnostic labs, pharmaceutical companies, or any other animal related facility.
- After earning your associate degree at TCTC, continue studies in animal and veterinary sciences at Clemson University, or in veterinary technology at Murray State University (Kentucky) or at Lincoln Memorial University (Tennessee).
- The number of Veterinary Technologists/Technicians employed in this region is expected to increase by 17.4% over the next four years and the number is expected to increase 30% nationally.

# COURSE DESCRIPTIONS

Veterinary Technology is a career dedicated to the health and wellbeing of animals. Licensed veterinary technicians provide professional and technical support to veterinarians, biologists, researchers, and industry, by providing patient care, including anesthesia and surgical support, diagnostic imaging, and laboratory procedures.

## **BIO 101 - Biological Science I**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is the first of a sequence introducing biology. Topics include the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology. Laboratory requirement supplements lectures.

Prerequisites: Satisfactory placement test scores for ENG 101 and MAT 101.

## **BIO 225 - Microbiology**

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. Laboratory requirement supplements lectures.

Prerequisites: BIO 101 with a grade of C or above.

## **ENG 101 - English Composition I**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented.

Prerequisites: Satisfactory Writing placement score or a grade of C or higher in ENG 100 or in ENG 155 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

## **MAT 120 - Probability and Statistics**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation.

Prerequisites: Satisfactory math placement score; or MAT 102 with a grade of C or above, or MAT 101 with a grade of A. And a Compass Reading score of 83 or RDG 100 with a grade of C or better or ENG 101 with a grade of C or better.

## **PSY 201 - General Psychology**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology.

Prerequisites: Reading and writing placement scores for ENG 101 or completion of ENG 100, ENG 101, or ENG 155 with a grade of C or higher. BIO 101 strongly recommended.

## **SPC 205 - Public Speaking**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: A grade of C or higher in ENG 101 or in ENG 103 or in ENG 155 or in ENG 156.

## **VET 101 - Animal Breeds and Husbandry**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the various species and breeds of domestic animals commonly encountered in veterinary medicine. Emphasis is placed on the recognition of each breed as well as important terminology, physiological data, and behavior of each species of animal.

## **VET 103 - Veterinary Medical Terminology**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course introduces the fundamental principles of veterinary medical terminology. This systems approach to building the medical vocabulary is designed to complement anatomy, physiology, pathology, and related areas of veterinary medicine.

## **VET 104 - Veterinary Anatomy and Physiology**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a general survey of the functional anatomy and physiology of the domestic animals commonly encountered in veterinary medicine. Dissection of representative cadavers is performed in the laboratory.

Prerequisites: VET 103.

## **VET 105 - Orientation to Veterinary Technology**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course is a study of the different job opportunities for a veterinary technician. In addition, the course exposes the student to key characteristics of people who are successful in the field.

## **VET 116 - Radiology and Parasitology**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of the radiologic techniques for all domestic animals in veterinary medicine, including taking, developing, and assessing for technical errors of large and small animal radiographs. This course also includes a survey and laboratory study of domestic animal parasitology.

## **VET 140 - Veterinary Pharmacology**

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is the study of the principles of pharmacology and the pharmaceutical products used in veterinary medicine.

Prerequisites: VET 150.

## **VET 142 - Veterinary Anesthesia**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of the principles and practical uses of anesthesia in veterinary medicine.

Prerequisites: VET 150.

## **VET 150 - Clinical Techniques I**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes a survey of the technical skills required by the veterinary technician in dealing with all domestic animals. The course includes techniques in restraint, handling, administration of medications, and collection of bodily specimens.

Prerequisites: VET 105.

## **VET 152 - Clinical Pathology**

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides a study of veterinary hematology, urology, and clinical chemistry followed by application of standard laboratory procedures and regulatory testing in each of these disciplines.

Prerequisites: VET 150.

## **VET 160 - Clinical Techniques II**

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a survey of technical skills required by the veterinary technician with emphasis on radiographic and anesthetic procedures.

Prerequisites: VET 150.

## **VET 170 - Veterinary Technician Externship**

Class Hours: 0 Lab Hours: 24 Credit Hours: 6

This course provides clinical training in the veterinary field under the direct supervision of a licensed veterinarian in a veterinary facility.

Prerequisites: Completion of first-year veterinary technology courses.

## **VET 201 - Diseases and Zoonosis**

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course provides a study of domestic animal diseases, including their causes, symptoms, prevention, treatment, and public health significance.

Prerequisites: VET 170.

## **VET 215 - Laboratory Animal Medicine**

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course provides a study of the animals and facilities used in research procedures in medicine. The course includes equipment, aseptic techniques, vivarium management, husbandry, and disease prevention in laboratory animals.

Prerequisites: VET 160.

## **VET 240 - Office Management and Client Education**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a study of office management, including the use of the computer in veterinary medical facilities. The course also includes an in-depth study of veterinary ethics and client education techniques.

Prerequisites: VET 160.

## **VET 250 - Clinical Techniques III**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes a survey of technical skills required by the veterinary technician with emphasis on laboratory techniques.

Prerequisites: VET 170.

## **VET 260 - Clinical Techniques IV**

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course will survey technical skills required by veterinary technicians with emphasis on medical and surgical emergencies.

Prerequisites: VET 250.

## **VET 270 - Advanced Medical Care**

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a study of the technician's role in emergency medical and surgical procedures. This course includes a survey of diagnostic procedures.

Prerequisites: VET 170.

## **VET 280 - Senior Seminar**

Class Hours: 1 Lab Hours: 0 Credit Hours: 1

This course allows various topics applicable to the second-year student's curriculum to be discussed in small groups. This includes, but is not limited to, issues arising from the veterinary technician externship.

Prerequisites: VET 170.