# **VETERINARY TECHNICIAN**

Students who are passionate about animals, excel in math and science, have strong decision-making skills, and enjoy hands-on work may find a rewarding career in veterinary technology. Working under the direct supervision of veterinarians, veterinary technicians play a vital role in animal health care, providing medical support and compassionate care. As essential members of the veterinary team, they are trained in animal handling, disease prevention, clinical procedures, and laboratory techniques. This dynamic and challenging profession offers the opportunity to make a meaningful impact on the lives of animals and the people who care for them.

See the Veterinary Technician page for program and contact information.

## **Degrees**

### **Career and Technical Education**

#### **Associate of Applied Science**

Veterinary Technician - Associate of Applied Science (AAS)

## Courses

#### VT 101 Intro to Veterinary Technician (3 Credits)

**Prerequisites:** BI 101 or BI 221Z; CH 104 or (CH 221Z and CH 227Z); COMM 218Z; MTH 095 or MTH 111Z (or higher) or minimum placement Math Level 18; WR 121Z; instructor approval based on admission into the veterinary technician program.

#### Corequisites: VT 102, VT 103, VT 117.

Introduces the role of the veterinary technician within the veterinary health care team, career opportunities for veterinary technicians, the history of veterinary medicine, ethics, common small animal breeds and effective communication techniques within the veterinary teams and with clientele.

#### VT 102 Veterinary Terminology (3 Credits)

Corequisites: VT 101, VT 103, VT 117.

Introduces veterinary medical terminology, including medical word parts, common medical terms, and a basic knowledge of word construction.

#### VT 103 Animal Hospital and Office Procedures (3 Credits)

Corequisites: VT 101, VT 102, VT 117.

Introduces veterinary medical records, admitting procedures, record maintenance, resume writing and job interview techniques. Covers basic bookkeeping skills, inventory control measures, marketing, client communication, the use of veterinary computer software, and professional development. Includes diversity, equity, and inclusion (DEI) principles to enhance patient care and workplace culture.

#### VT 108 Small Animal Nursing (4 Credits)

**Prerequisites:** VT 101, VT 102, VT 103 and VT 117. **Corequisites:** VT 110, VT 114, VT 118.

Introduces basic techniques necessary for the provision of nursing care to small animals, including small animal restraint, husbandry, behavior, physical examination, medication administration, and grooming. Includes kennel duty experience in the care of a variety of companion animals.

#### VT 110 Parasitology and Pathology (4 Credits)

**Prerequisites:** VT 101, VT 102, VT 103 and VT 117. **Corequisites:** VT 108, VT 114, VT 118.

Explores the life cycles, modes of transmission, and diseases associated with common parasites of animals. Lab introduces diagnostic procedures and covers identification of parasites using prepared slides and collected specimens.

#### VT 111 Hematology and Urinalysis (4 Credits)

**Prerequisites:** VT 108, VT 110, VT 114, VT 118. **Corequisites:** VT 112, VT 113, VT 116.

Covers laboratory techniques of hematology, serum chemistry, and urinalysis. Also explores special commercial laboratory test procedures.

#### VT 112 Advanced Small Animal Nursing (4 Credits)

Prerequisites: VT 108, VT 110, VT 114 and VT 118. Corequisites: VT 111, VT 113, VT 116.

Covers advanced nursing techniques including parenteral administration of medication, bandaging and wound care, cardiopulmonary resuscitation (CPR), physical rehabilitation, diagnostic sample collection, and vaccination of small animals.

#### VT 113 Exotic and Lab Animal Medicine (3 Credits)

Prerequisites: VT 108, VT 110, VT 114 and VT 118.

Corequisites: VT 111, VT 112, VT 116.

Provides an overview of the anatomy and physiology, the care and handling, and diseases of common laboratory and exotic small animals. Covers the principles of lab animal use in research with an emphasis on animal welfare.

#### VT 114 Pharmaceutical Math (3 Credits)

**Prerequisites:** VT 101, VT 102, VT 103, VT 117 and MTH 095 or MTH 111Z (or higher) or minimum placement Math Level 18. **Corequisites:** VT 108, VT 110, VT 118.

Covers pharmacological mathematics, including drug dosage calculations and fluid calculations. Introduces prescription terminology and labeling.

#### VT 116 Pharmacology (4 Credits)

Prerequisites: VT 108, VT 110, VT 114 and VT 118. Corequisites: VT 111, VT 112, VT 113. Explores pharmacological principles, including classes, mechanisms, and side effects of drugs used in veterinary medicine.

#### VT 117 Veterinary Anatomy & Physiology I (5 Credits)

**Prerequisites:** Acceptance into the Veterinary Technician Program. **Corequisites:** VT 101, VT 102, VT 103.

First of two courses covering the structure and function of animal bodies and the anatomical and physiological differences between selected species. Examines body organization, cellular biology, histology, and gross anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems. Concurrent labs include the use of skeletons, models, virtual anatomy tools and dissection of cadavers.

#### VT 118 Veterinary Anatomy & Physiology II (4 Credits)

**Prerequisites:** VT 101, VT 102, VT 103 and VT 117. **Corequisites:** VT 108, VT 110, VT 114.

Second of two courses covering the structure and function of animal bodies and the anatomical and physiological differences between domestic species. Continues the study of the interrelationship of organ systems, including the endocrine, reproductive, cardiovascular, lymphatic, digestive, respiratory, and urinary systems.

#### VT 199 Special Topics: Veterinary Technician (1-4 Credits)

Provides a learning experience not currently available in the veterinary technician program; this course is in development to be proposed as a permanent course.

#### VT 200 Radiation Safety (2 Credits)

**Prerequisites:** VT 111, VT 112, VT 113 and VT 116. **Corequisites:** VT 201, VT 203, VT 209, VT 212. Introduces x-radiation and safety principles involved in using x-ray machines.

#### VT 201 Anesthesiology and Surgery Techniques (4 Credits)

**Prerequisites:** VT 111, VT 112, VT 113, and VT 116. **Corequisites:** VT 200, VT 203, VT 209, VT 212. Covers the principles and practices of veterinary anesthesia and surgical assistance.

#### VT 202 Surgical Nursing and Dentistry (4 Credits)

**Prerequisites:** VT 200, VT 201, VT 203, VT 209, and VT 212. **Corequisites:** VT 204, VT 206, VT 208.

Covers common dental problems and dental prophylaxis. Explores preoperative, operative, and post-operative protocols for routine surgical procedures. Provides hands-on experience in anesthesiology, surgical patient preparation, surgical assistance, and dentistry.

#### VT 203 Large Animal Nursing (4 Credits)

**Prerequisites:** VT 111, VT 112, VT 113 and VT 116. **Corequisites:** VT 200, VT 201, VT 209, VT 212.

Covers common large animal breeds (ruminant, equine, swine, and chickens). Introduces techniques necessary for the provision of nursing care to large animals, including restraint, husbandry, behavior, physical examination, medication administration, diagnostic sample collection, grooming, bandaging, nutrition, and vaccination. Includes animal husbandry experience in the care of large animals.

#### VT 204 Diagnostic Imaging (3 Credits)

**Prerequisites:** VT 200, VT 201, VT 203, VT 209 and VT 212. **Corequisites:** VT 202, VT 206, VT 208.

Covers the operation and use of fixed, portable, and dental x-ray machines; creating diagnostic images; radiographic positioning of animals; and evaluation of radiographic technique. Explores additional diagnostic imaging modalities, such as ultrasound, MRI, CT, and endoscopy.

#### VT 206 Small Animal Diseases (4 Credits)

**Prerequisites:** VT 200, VT 201, VT 203, VT 209 and VT 212. **Corequisites:** VT 202, VT 204, VT 208.

Covers preventative medicine and diseases of small animals including the public health significance of relevant small animal diseases. Examines the role of the veterinary technician in performing diagnostics, nursing care, and client education.

#### VT 208 Animal Nutrition (2 Credits)

Prerequisites: VT 200, VT 201, VT 203, VT 209 and VT 212. Corequisites: VT 202, VT 204, VT 206.

Covers the basic principles of nutrition, the development of nutrition protocols based on the life stage and health status of the patient, and explores special prescription diets used in veterinary medicine.

#### VT 209 Large Animal Diseases (3 Credits)

Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 200, VT 201, VT 203, VT 212.

Covers preventative medicine and diseases of large animals including the public health significance of relevant large animal diseases. Examines the role of the veterinary technician in performing diagnostics, nursing care, and client education.

#### VT 212 Veterinary Microbiology (4 Credits)

**Prerequisites:** VT 111, VT 112, VT 113 and VT 116. **Corequisites:** VT 200, VT 201, VT 203, VT 209.

Explores clinical microbiology and cytology as it relates to veterinary technology. Covers the basic principles of microbial classification, growth, and pathogenicity as well as various laboratory methods used in identification of microorganisms.

#### VT 280 Clinical Practicum I (9 Credits)

Prerequisites: VT 202, VT 204, VT 206 and VT 208. Corequisites: VT 281.

This is the first of two practicum courses that provides two three-week practicums where students link prior coursework with off-campus learning experiences. Students gain hands-on experience working with live animal cases in a veterinary hospital. Each student is expected to attend 120 total hours for each three-week period at the practicum sites for a total of 240 hours. The course also reviews the Veterinary Technician program curriculum for preparation for sitting for the Veterinary Technician National Exam (VTNE).

#### VT 281 Clinical Practicum II (5 Credits)

Prerequisites: VT 202, VT 204, VT 206 and VT 208.

Second of two practicum courses; students will spend three weeks in a veterinary hospital continuing to link prior coursework with off-campus learning experiences using advanced skills. Students can request to attend a specialized clinic. Each student is expected to attend 120 total hours in the three-week time period. The course also continues to review the Veterinary Technician program curriculum for preparation for sitting for the Veterinary Technician National Exam (VTNE). Students will return the last week to reflect on their practicum experience and take a program exit exam.

#### VT 298 Independent Study: Veterinary Technician (1-6 Credits) Prerequisites: Instructor approval.

**Recommended preparation:** prior coursework in the discipline. Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading.

#### VT 299 Special Topics: Veterinary Technician (1-4 Credits)

Provides a learning experience not currently available in the veterinary technician program; this course is in development to be proposed as a permanent course.