

## VETERINARY TECHNOLOGY (VTE)

### **VTE 101. Introduction to Veterinary Technology. 3 Credits.**

This course will introduce new Veterinary Technology students to the expectations of learning throughout the program, medical terminology, medical calculations, breed identification of companion animals, common regulatory agencies throughout the field, and credentialing of veterinary professionals. Students will explore the inner workings of veterinary hospitals, discover the medical ethics laws for veterinary health care professionals, partake in appropriate communication between veterinary professionals and clients, interpret medical records, schedule appointments and discuss common laws relating to medical malpractice within the veterinary field. Prerequisites: ENG 098, MAT 162 (or corequisite), RDG 098, FYE 101 or placement; high school biology within the past three years with a grade of "B" or higher. Fall.

### **VTE 102. Anatomy and Physiology of Domestic Animals I. 4 Credits.**

Participants learn the inner workings of the domesticated animal's body and how organs develop, their functions, and the reason they are present in the body. Students will use preserved animals, teaching mannequins and anatomical models of a variety of species to study both gross and microscopic anatomy of the integumentary, skeletal and muscular systems. Prerequisites: ENG 101 (or corequisite); MAT 162 (or corequisite); VTE 101 (or corequisite). Fall.

### **VTE 103. Anatomy and Physiology of Domestic Animals II. 4 Credits.**

VTE 103 is a continuation of VTE 102. This course will more comprehensively explore the inner workings of the body. Students will learn about the brain, as well as the nervous, urinary, respiratory, endocrine, circulatory, reproductive and urinary systems. Prerequisites: VTE 102 with a C+ or higher. Spring.

### **VTE 110. Farm Animal Medicine. 4 Credits.**

This course will discuss breed identification, restraint techniques, husbandry, behavior, anatomy, nutrition, common diseases and medical practices in large animal species. Laboratories will meet off-site at large animal facilities. Prerequisites: VTE 101, VTE 103 with a C+ or higher. Fall.

### **VTE 115. Veterinary Parasitology. 4 Credits.**

During this course, students will learn a variety of common internal and external parasites that are encountered in veterinary medicine. Students will be able to identify each parasite, both microscopically and grossly; the common symptoms associated with each parasitic infection; the life cycles; methods of testing; treatment and prevention strategies; as well as public health significance of each parasite covered. Prerequisites: VTE 101 (or corequisite). Fall.

### **VTE 120. Animal Diseases. 2 Credits.**

Students will explore numerous congenital, infectious, traumatic and neoplastic disease processes that can affect companion animal species. Each student will be familiar with identifying each disease, its symptoms and presenting complaints, and the diagnostic and therapeutic approaches veterinary professionals must take. Prerequisites: BIO 205 (or corequisite), CHE 107, and VTE 102 with a C+ or higher. Spring.

### **VTE 200. Domestic Animal Nutrition and Health. 2 Credits.**

The course will cover the canine and feline digestive system, the nutrition needed by these species, the different types of pet foods and their role in nutrition, and the nutritional requirements for the different life-stages of cats and dogs. Prerequisites: VTE 101 with a C+ or higher. Spring.

### **VTE 205. Veterinary Pharmacology. 2 Credits.**

Students will explore the principles of pharmacology including general drug use; administration; types of drugs; indications and contraindications of drug use; and mechanism of action; as well as drug labeling, dispensing and packaging. Each student will also understand the legalities and ethics of using controlled substances. Medical calculations, prescription notation and proper record keeping will also be reviewed. Prerequisites: VTE 101 with a C+ or higher and CHE 107. Fall.

### **VTE 208. Veterinary Radiology. 2 Credits.**

This course will cover general veterinary radiology safety, x-ray generation, film handling and processing, position and restraint. Ultrasonography, CT and MRI will also be covered. Prerequisites: VTE 103 and VTE 110 with a C+ or higher. Spring.

### **VTE 210. Veterinary Clinical Nursing Skills. 4 Credits.**

The purpose of this course is to provide the student with the knowledge and the hands-on skills essential for the day-to-day veterinary technician role. The course will cover topics such as performing thorough physical exams; triaging patients; restraint and handling; administering medications parenterally, intramuscularly, subcutaneously and intravenously; venipuncture; intravenous catheter placement; urinary catheter placement; fluid therapy; emergency procedures; bandaging; and use and translation of normal and abnormal electrocardiograms. Prerequisites: VTE 103, VTE 120 with a C+ or higher. Fall.

**VTE 215. Veterinary Technician Internship I. 3 Credits.**

Students are required to participate in an off-site externship for 9 hours weekly (126 total hours) at a facility of their choosing. Each facility must be pre-approved by the Veterinary Technology Program Director prior to the student starting his/her externship. Students may select an externship in any type of facility they please (i.e. large animal, emergency medicine, specialty medicine, marine life, research and exotics), but must be under direct supervision of a certified veterinary technician (CVT), unless otherwise decided by the Program Director. Each rotation will require a journal submitted at the end of the rotation explaining day-to-day activities (in detail) in which the student participated while at the externship. Prior to completing the course, students are required to present an interesting case study in which they were involved during their externships. Prerequisites: VTE 120, VTE 210 with a C+ or higher. Fall.

**VTE 216. Veterinary Technician Internship II. 3 Credits.**

Students are required to participate in an off-site externship for 9 hours weekly (126 total hours) at a facility of their choosing. Each facility must be pre-approved by the Veterinary Technology Program Director prior to the student starting his/her externship. Students may select an externship in any type of facility they please (i.e. large animal, emergency medicine, specialty medicine, marine life, research and exotics), but must be under direct supervision of a certified veterinary technician (CVT), unless otherwise decided by the Program Director. Each rotation will require a journal submitted at the end of the rotation explaining day-to-day activities (in detail) in which the student participated while at the externship. Prior to completing the course, students are required to present an interesting case study in which they were involved during their externship. Offered during Spring and Summer semesters. Prerequisites: VTE 215 with a C+ or higher.

**VTE 218. Domestic Animal Behavior. 2 Credits.**

This course will explore the different behaviors displayed by canines and felines. Body language, communication, social structure and life stage behavior will be discussed in detail. Strategies for preventing and correcting unwanted behaviors will also be discussed. Prerequisites: VTE 220 with a C+ or higher. Fall.

**VTE 220. Veterinary Clinical Laboratory Procedures. 4 Credits.**

The purpose of this course is to provide students with the knowledge of how to properly collect and handle laboratory specimens, proper storage of each specimen, and general laboratory procedures. Each student will learn the skills used by most veterinary practices in the fields of blood chemistries, hematology, cytology and urine. Prerequisites: VTE 101 with a C+ or higher and VTE 120 (or corequisite). Spring.

**VTE 222. Laboratory Animal Medicine and Management. 2 Credits.**

This course will provide the student with the information needed to pursue a career as a veterinary technician in a research facility. The course will cover the local, federal and state mandated laws and regulations regarding the care and use of laboratory animals. Students will explore proper husbandry, restraint and technical skills such as drawing blood and injecting medications into laboratory species which include mice, rats, hamsters and rabbits. Prerequisites: VTE 103, VTE 200, VTE 210, and VTE 220 with a C+ or higher. Spring.

**VTE 225. Surgical Nursing and Dentistry. 4 Credits.**

Students will explore the knowledge and experience that are essential in performing safe surgical procedures in veterinary practice. Students will know how to anesthetize small animals; properly and effectively monitor patients under anesthesia; and use aseptic techniques both for prepping patients for procedures and for veterinary personnel. Students will be able to identify and explain proper use of surgical equipment and surgical instruments. Students are required to understand the procedures and safety precautions for patients and veterinary professionals before, during, and after surgical procedures. Students will also develop the skills for performing effective dentistry procedures, including dental x-rays, tooth extractions, and dental cleanings, as well as the knowledge to identify dental diseases. Prerequisites: VTE 103, VTE 205, and VTE 210 with a C+ or higher. Spring.