

# VETERINARY TECHNOLOGY (VET)

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## **VET 1001 Introduction to Veterinary Technology (3 Credits)**

Introduction to Veterinary Technology is an overview of the veterinary technology profession. This course introduces the role of the veterinary technician and employment opportunities in the field. Covered topics include overviews of breed differentiation, nutrition, reproduction, and animal behavior.

Prerequisites: Eligible for ENG 1010

Previous: Legacy Equivalent(s): VET\* 101

## **VET 1002 Veterinary Office Management and Communication (3 Credits)**

This is a business management course for Veterinary Technology students. Topics include office procedures and practices, staff management, triaging phone calls, recordkeeping, the human-animal bond, stress management, and client relations, including working with members of the public from diverse cultural, ethnic, religious, and socioeconomic backgrounds. Personnel administration and other administrative procedures common to veterinary medical practices including databases are reviewed.

Prerequisites: Admission to Veterinary Technology Program

*General Education:* Oral Communication (ORAX)

Previous: Legacy Equivalent(s): VET\* 102

## **VET 1003 Animal Care and Handling (3 Credits)**

This course provides practical knowledge and hands-on experience with exotic, laboratory, small and large animals. Common husbandry practices, diet, behavior and handling and restraint are discussed. Normal physiologic values and physical exam findings and common diseases affecting each species are reviewed, along with disease prevention methods. Restraint, basic examination, grooming and handling methodologies are practiced in lab.

Prerequisites: Admission to Veterinary Technology Program

Previous: Legacy Equivalent(s): VET\* 100

## **VET 1026 Veterinary Terminology and Medical Math (2 Credits)**

This two-credit course is an introduction to basic veterinary medical terminology, and to the mathematical calculations needed for the veterinary technology field. Veterinary terminology topics will include word roots, suffixes and prefixes, and medical abbreviations; directional terms; terminology describing the anatomy, physiology, and diseases of organ systems; and diagnostic, clinical and surgical procedures. Species-specific terms involving the anatomy, physiology, husbandry, and diseases that are unique to various domestic species will also be addressed. Mathematical topics will include: the metric system of measurement; decimals and percentages; ratios and proportions; dilutions; dimensional analysis; the calculation of clinical doses of oral and parenteral medications; intravenous fluid (IVF) rate calculations; and nutritional energy requirement calculations. The application of mathematics to the veterinary clinical setting will be stressed. Clinical cases will be utilized for assignments in this course.

Prerequisites: Admission to Veterinary Technology Program

Previous: Legacy Equivalent(s): VET\* 126

## **VET 1051 Small Animal Clinical Nursing (4 Credits)**

Nursing procedures in small animals and laboratory species are discussed. Topics include physical examinations, common medical nursing techniques, and emergency care. Long term nursing care of common animal conditions will be discussed including client education. The course includes vaccination protocols, nutritional support and specialized problems encountered in companion and laboratory animals. Relevant clinical cases will be utilized in lecture discussions.

Prerequisites: VET 1001, VET 1002, VET 1003, and VET 2001 - all with C or higher

Previous: Legacy Equivalent(s): VET\* 151

## **VET 1052 Large Animal Clinical Nursing (4 Credits)**

The course focuses on the specifics related to large animal medicine and nursing practices including techniques. Lectures include clinical anatomy and physiology, nutrition, and breeding of agricultural species. The etiology of disease, transmission, prevention and disease control are discussed. Topics include nursing care, diagnostic techniques, reproduction, husbandry, and common diseases. Laboratory sessions include restraint, physical exams, specimen collection, drug administration, and principles of husbandry. Supervised clinical field work is required.

Prerequisites: VET 1001, VET 1003, and VET 2001 - all with C or higher

Prerequisite or corequisite: VET 2002 (with C or higher if prerequisite)

Previous: Legacy Equivalent(s): VET\* 152

## **VET 2001 Veterinary Anatomy and Physiology I (4 Credits)**

Veterinary anatomy and physiology of domestic species presented as a two-course series. The anatomic structures and physiologic functions of domestic animals including companion species are discussed. The first semester reviews the basic chemical principles, foundations of structure and function of the most common species including the integumentary, skeletal, muscular, nervous, sensory, and endocrine systems. Comparative aspects of other species including farm animals are provided. Lecture and laboratory exercises emphasize the understanding of the organized body state and the relationship of various components including cells, tissues, organs and body systems.

Prerequisites: Admission to Veterinary Technology Program

Previous: Legacy Equivalent(s): VET\* 201

## **VET 2002 Veterinary Anatomy and Physiology II (4 Credits)**

Veterinary anatomy and physiology of domestic species presented as a two-course series. The anatomic structures and physiologic functions of domestic animals including companion species are discussed. This course is a continuation of VET 2001 and continues the foundations of structure and function of the most common species including the hematopoietic, lymphatic, immune, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Comparative aspects of other species including farm animals are provided. Lecture and laboratory exercises emphasize the understanding of the organized body state and the relationship of various components including cells, tissues, organs and body systems. This course also covers nutrition and metabolism along with the unique aspects of avian and reptile anatomy and physiology.

Prerequisites: VET 2001 with C or higher

Previous: Legacy Equivalent(s): VET\* 202

**VET 2005 Veterinary Laboratory Procedures (2 Credits)**

This course teaches the theory behind clinical sample analysis utilizing laboratory procedures, including specimen collection, hematology, cytology, blood chemistry, urinalysis, and serology. Emphasis is on manual performance of basic laboratory diagnostic procedures and discussion of the relevance of laboratory findings to the veterinary practitioner.

Prerequisites: VET 1026 and VET 2001, both with C or higher  
Prerequisite or corequisite: VET 2002 (with C or higher if prerequisite)  
Corequisite: VET 2006 OR VET 2031 with a C or higher  
Previous: Legacy Equivalent(s): VET\* 205

**VET 2006 Clinical Application to Veterinary Laboratory Procedures (1 Credits)**

This lab is designed to prepare students to examine blood and urine for diagnostic and prognostic purposes in veterinary practice. Students will learn to perform various tests including complete blood counts, blood chemistries, serological tests, fecal testing cytology, and complete urinalyses.

Prerequisites: VET 2001, both with C or higher  
Prerequisite or corequisite: VET 2002 (with C or higher if prerequisite)  
Corequisite: VET 2005  
Previous: Legacy Equivalent(s): VET\* 206

**VET 2012 Principles of Veterinary Imaging (1 Credits)**

The principles of radiologic imaging and its safe use in patient diagnostics are presented as well as the technical skills needed to perform radiological procedures. Animal restraint, positioning, special diagnostic techniques and imaging are reviewed. Ultrasonography, Computerized Axial Tomography, Magnetic Resonance Imaging and Positron Emission Tomography will be discussed.

Prerequisites: VET 1026, VET 1051, and VET 2002 - all with C or higher  
Prerequisite or corequisite: VET 1052 (with C or higher if prerequisite)  
Corequisite: VET 2013 or VET 2031  
Previous: Legacy Equivalent(s): VET\* 212

**VET 2013 Clinical Diagnostic Imaging for the Veterinary Technician (1 Credits)**

This course prepares the veterinary technician to obtain diagnostic radiographic images in the veterinary patient. Animal restraint and positioning for a variety of common radiographic views and procedures are practiced, first in manikins and then in live patients. Radiation safety, proper image labeling and filing, and image quality assessment are stressed throughout.

Prerequisites: VET 2002, all with C or higher  
Prerequisite or corequisite: VET 1052 (with C or higher if prerequisite)  
Corequisite: VET 2012  
Previous: Legacy Equivalent(s): VET\* 212

**VET 2020 Animal Pathophysiology (3 Credits)**

The course encompasses health and diseases of the major domestic animal species. Clinical signs of organ dysfunction, pathophysiology, diagnostic tests, treatment, and prevention are reviewed. The lecture topics are approached in an organ system format including integumentary, musculoskeletal, neurosensory, cardiovascular, respiratory, digestive, renal and reproductive, hematologic and immunologic systems.

Prerequisites: VET 1051, VET 1052, VET 2002, VET 2005 and VET 2050 and VET 2006 or VET 2031 - all courses with a C or higher  
Previous: Legacy Equivalent(s): VET\* 220

**VET 2030 Veterinary Anesthesia and Surgical Nursing (3 Credits)**

This course is intended to prepare the student to administer anesthesia, prepare and monitor patients, and assist in surgical procedures. Surgical and anesthetic procedures, including a study of anesthetic drugs, patient preparation and post-op care, will be discussed.

Prerequisites: VET 1051, VET 2002, VET 2005, VET 2050 and VET 2095 - all with a C or higher  
Corequisite: VET 2031 or VET 2032 or VET 2033  
Previous: Legacy Equivalent(s): VET\* 230

**VET 2031 Combined Clinical Course for Veterinary Surgical Nursing, Lab Procedures, and Radiology (3 Credits)**

This course is the combined clinical course for the lecture material covered in VET 2030. This course prepares students to administer and monitor anesthesia, prepare surgical patients and assist in surgical procedures, perform radiographic studies, and perform veterinary laboratory procedures. Training manikins and models are used for initial instruction, after which students will work with live cats and dogs receiving routine care.

Prerequisites: VET 2095, all with a C or higher  
Corequisite: VET 2030  
Previous: Legacy Equivalent(s): VET\* 230

**VET 2032 Clinical Anesthesia, Surgical Nursing and Dentistry for Veterinary Technicians (1 Credits)**

This course prepares the veterinary technician student to administer and monitor anesthesia, prepare surgical patients and assist in surgical procedures, and perform dental prophylaxis and radiography. Training manikins and models are used for initial instruction, after which students will work with live cats, dogs and other small animal patients receiving routine surgical and dental care. While completing their clinical requirements, students will have the opportunity to practice previously learned nursing and physical exam skills, and will also gain exposure to clinical techniques that are best practiced on sedated patients, such as urinary catheter placement, orogastric tube placement, Buccal Mucosal Bleeding Time (BMBT) testing, and cystocentesis.

Prerequisites: VET 2095, all with a C or higher  
Corequisite: VET 2040  
Previous: Legacy Equivalent(s): VET\* 230L

**VET 2033 Clinical Approach to Veterinary Anesthesia and Surgical Nursing (1 Credits)**

This course prepares students for a hands-on approach to veterinary anesthesia and surgical nursing. Students will administer anesthesia and perioperative monitoring of the patient. Emphasis will be placed on patient assessment, pain management, anesthetic protocols, anesthetic depth, surgical/anesthetic complications, and emergency techniques. Students will become familiar with common surgical procedures and anesthetic drugs usage and effects. Additional hands-on topics include sterile/aseptic techniques, identification of surgical instruments and equipment, and other special nursing considerations.

Prerequisites: VET 2095, all with a C or higher  
Previous: Legacy Equivalent(s): VET\* 230

**VET 2035 Veterinary Microbiology and Immunology (4 Credits)**

This course is an introduction to Veterinary Microbiology for the veterinary technician. Topics include microbial morphology, metabolism, genetics, growth and control, infection, immunity, veterinary commensals and pathogens. Veterinary relevant clinical applications are emphasized. Laboratory work emphasizes bacterial staining techniques, sample collection techniques, microscopic examination, culturing isolation and biochemical reactions.

Prerequisites: Admission into the Veterinary Technology Program and Instructor Approval

Previous: Legacy Equivalent(s): VET\* 235

**VET 2038 Veterinary Parasitology (3 Credits)**

This course is intended to familiarize students with the parasites of importance in the veterinary field with an emphasis on the diagnosis and treatment of parasitic diseases of domestic animals. A laboratory component focuses on clinical diagnostic procedures including immunodiagnostic techniques using both living and preserved specimens. Topics include prevention of infection and transmission, and zoonotic disease transmission, control and epidemiological concerns.

Prerequisites: VET 1051, VET 1052, VET 2005 and VET 2050 and VET 2006 or VET 2031 - all courses with a C or higher

Previous: Legacy Equivalent(s): VET\* 238

**VET 2040 Periodontology and Oral Radiology (2 Credits)**

This course is an introduction to the theory and clinical aspects of veterinary dentistry. Topics include oral anatomy, terminology, periodontology, oral radiography, endodontics, orthodontics and restorative dentistry. Tasks performed by veterinary technicians, including oral radiography will be discussed and taught in a clinical setting.

Prerequisites: VET 2005 - with C or higher

Prerequisite or corequisite: (VET 2012 and VET 2030) and (VET 2031 or both VET 2013 and (VET 2032 or VET 2033)) - all with C or higher if prerequisite

Previous: Legacy Equivalent(s): VET\* 240

**VET 2050 Principles of Pharmacology for Veterinary Technicians (3 Credits)**

The study of dose and dosage in applied pharmacology. Topics include basic mathematics, conversions, measurements, drug calculations, drug orders and fluid rate calculations. The major classes of drugs used in therapeutics, dose response characteristics, mechanisms of action, major physiological effects, and toxicity and drug interactions are discussed. A review of laws applying to licensure and use of controlled substances in veterinary medicine is included.

Prerequisites: VET 1026 and VET 2001 both with C or higher

Prerequisite or corequisite: VET 2002 (with C or higher if prerequisite)

Previous: Legacy Equivalent(s): VET\* 250

**VET 2095 Veterinary Technology Externship I (1 Credits)**

This externship is a student's first externship experience. The externship will offer a supervised experience under the direction of a licensed veterinarian, certified technician, or animal research technician through placement at an off-site veterinary hospital, private practice, or laboratory facility. Students will refine skills learned in all previous veterinary technology courses. Students must complete 240 externship hours total throughout both externships as defined by the campus program coordinator. The externship site must be in a faculty-approved facility.

Prerequisites: VET 1002, VET 1051, and VET 2002, all with C or higher and instructor approval

Previous: Legacy Equivalent(s): VET\* 280

**VET 2195 Veterinary Technology Externship II (1 Credits)**

This externship is a student's final externship experience. Students must demonstrate competency in the defined learning objectives in order to meet program completion expectations. The externship will offer a supervised experience under the direction of a licensed veterinarian, certified technician, or animal research technician through placement at an off-site veterinary hospital, private practice, or laboratory facility. Students will refine skills learned in all previous veterinary technology courses. Students must complete 240 externship hours total throughout both Externship I and Externship II as defined by the campus program coordinator. The externship site must be in a faculty-approved facility.

Prerequisites: Instructor Approval

Previous: Legacy Equivalent(s): VET\* 290