

VETERINARY TECHNOLOGY (VET)

VET 110 Introduction to Veterinary Technology

4 Class Hours, 4 Quarter Credit Hours
Corequisites: BIO 116, VET 112, VET 113

This course introduces students to the role of veterinary technicians as members of the veterinary healthcare team. This course covers medical terminology, professional ethics and legal regulation, companion animal breeds, pet loss, bereavement and euthanasia, occupational hazards and professional organizations.

VET 112 Veterinary Anatomy and Physiology I

3 Class Hours, 3 Quarter Credit Hours
Corequisites: BIO 116, VET 110, VET 113

This course is the first of two courses where the veterinary technology student will comprehensively study the structure and function of the animal body. Topics will include the dynamic equilibrium between the animal's body and the external environment, levels of organization in the animal body, properties and distribution of body fluids, the integumentary, musculoskeletal, and nervous systems.

VET 113 Veterinary Anatomy and Physiology I Lab

3 Lab Hours, 1 Quarter Credit Hours
Corequisites: BIO 116, VET 110, VET 112

The laboratory is designed to assist in learning the material presented in Veterinary Anatomy and Physiology I lecture through hands-on activities which will include examination of cells and tissues under a microscope, bones, anatomical models, and dissection of animal specimens. Units covered include general introductory material, histology, integumentary system, skeletal system, muscular system, and the nervous system.

VET 121 Animal Management

3 Class Hours, 3 Lab Hours, 4 Quarter Credit Hours
Prerequisites: VET 110 and VET 112 and VET 113 and BIO 116
Corequisites: VET 122, VET 123

This course covers the care and management of companion animals, ruminants, and horses. Emphasis will be on husbandry including handling, care, feeding, breeding, behavior, and disease prevention.

VET 122 Veterinary Anatomy and Physiology II

3 Class Hours, 3 Quarter Credit Hours
Prerequisites: VET 112 and VET 113 and VET 110 and BIO 116
Corequisites: VET 121, VET 123

A continuation of Veterinary Anatomy and Physiology I, this course concentrates on the cardiovascular, digestive, respiratory, endocrine, urinary, and reproductive systems. Also covered is the anatomy and physiology of birds, reptiles, and amphibians.

VET 123 Veterinary Anatomy and Physiology II Lab

3 Lab Hours, 1 Quarter Credit Hours
Prerequisites: VET 113 and VET 112 and VET 110 and BIO 116
Corequisites: VET 121, VET 122

The laboratory is designed to assist in learning the material presented in Veterinary Anatomy and Physiology II lecture through hands-on activities which will include examination of anatomical models and dissection of animal specimens. Units covered include the cardiovascular system, respiratory system, digestive system, urinary system, reproductive system, endocrine system, and avian anatomy.

VET 131 Veterinary Pharmacology

3 Class Hours, 3 Lab Hours, 4 Quarter Credit Hours
Prerequisites: VET 121 and VET 122 and VET 123 and MA 109 and CHM 101

Corequisites: BIO 122, VET 240
Principles of veterinary pharmacology including pharmacokinetics, pharmacodynamics, drug indications, side effects, contraindications and practical applications of drugs including drug handling, dosing calculation, administration methods, prescription writing, and terminology.

VET 137 Laboratory Animal Technology and Lab

2 Class Hours, 3 Lab Hours, 3 Quarter Credit Hours
Prerequisites: VET 242 and VET 243 and VET 244 and VET 262 and VET 263

Corequisites: VET 138, VET 248, VET 250, VET 254
This course introduces the field of laboratory animal science and exotic companion animal care and management. Topics covered include the biology, reproduction, behavior, housing, nutritional requirements, handling, environmental enrichment, healthcare, research use and welfare of laboratory and exotic companion animal species. The laboratory reinforces important concepts and students will have hands-on experience with proper handling and clinical skills. Practical experience will include rotations through local veterinary facilities and may occur on days/times other than scheduled class days.

VET 138 Veterinary Practicum I

6 Lab Hours, 2 Quarter Credit Hours
Prerequisites: VET 244 and VET 242 and VET 243 and VET 262 and VET 263

Corequisites: VET 137, VET 248, VET 250, VET 254
This is an introductory practical experience in the application of veterinary technology at an off-campus site which may include a small animal hospital or clinic or other approved veterinary facility. Students work under the supervision of a veterinarian or credentialed veterinary technician while observing and assisting members of the veterinary healthcare team. Students will perform introductory skills found in the AVMA CVTEA Veterinary Technology Student Essential and Recommended Skills List that fall within the job descriptions of the veterinary technicians and support staff employed at the site. Practical experience will include rotations through local veterinary facilities and may occur on days/times other than scheduled class days.

VET 240 Animal Diseases

4 Class Hours, 4 Quarter Credit Hours
Prerequisites: VET 121 and VET 122 and VET 123 and BIO 116
Corequisites: BIO 122, VET 131

This course covers the principles of disease as they apply to veterinary medicine. Topics include classification of causes of disease, response to injury, sources and transmission of agents of disease, common diseases of companion, farm, avian, and exotic animals. Additionally, students will study veterinary parasitology, toxicology and the epidemiology of major zoonotic diseases.

VET 242 Animal Nursing

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: VET 131 and BIO 116 and BIO 122 and VET 240

Corequisites: VET 243, VET 244, VET 262, VET 263

This course introduces clinical skills for the veterinary technician. Topics include handling and restraint, general nursing care of the patient, examination room procedures, drug administration, client education and communication. Additional clinical nursing skills covered include venipuncture, bandaging, electrocardiograph recording and other clinical techniques. Veterinary nursing procedures and teamwork are emphasized.

VET 243 Small Animal Nursing Lab

3 Lab Hours, 1 Quarter Credit Hours

Prerequisites: VET 131 and BIO 116 and BIO 122 and VET 240

Corequisites: VET 242, VET 244, VET 262, VET 263

This laboratory provides hands-on experience in clinical skills for the veterinary technician including handling, restraint, general nursing care of the patient, examination room procedures, drug administration, client education and communication. Additional clinical nursing skills covered include venipuncture, bandaging, electrocardiograph recording and other clinical techniques. Veterinary nursing procedures and teamwork are emphasized. Practical experience through rotations at off-campus facilities may be required.

VET 244 Veterinary Anesthesia and Dentistry Lab

3 Lab Hours, 1 Quarter Credit Hours

Prerequisites: VET 131 and BIO 122 and VET 240 and BIO 116

Corequisites: VET 242, VET 243, VET 262, VET 263

This course provides knowledge and practical experience in dentistry and anesthesia. Topics include parts and preparation of the anesthesia equipment and related materials to ensure safe and reliable operation; knowledge of anatomy and physiology as it applies to anesthesia; dental anatomy, nomenclature and charting; equipment, instruments and supplies as they relate to dentistry; prophylaxis techniques; dental radiography; pathophysiology of periodontal disease; and home care for the client.

VET 248 Veterinary Practicum II

6 Lab Hours, 2 Quarter Credit Hours

Corequisites: VET 137, VET 138, VET 250, VET 254

This continuation of VET 138 is a practical experience in the application of veterinary technology at an off-campus site which may include a small animal hospital or clinic or other approved veterinary facility. Students work under the supervision of a veterinarian or credentialed veterinary technician while observing and assisting members of the veterinary healthcare team. Students will focus on mastery of skills performed in VET 138. Practical experience will include rotations through local veterinary facilities and may occur on days/times other than scheduled class days.

VET 250 Large Animal Nursing Laboratory

3 Lab Hours, 1 Quarter Credit Hours

Prerequisites: VET 242 and VET 243 and VET 244 and VET 262 and VET 263

Corequisites: VET 137, VET 138, VET 248, VET 254

This laboratory provides hands-on experience in equine and bovine techniques including handling & restraint, husbandry, collecting diagnostic specimens, bandaging, and equine radiography. Practical experience through rotations at off-campus farms will be required.

VET 252 Veterinary Imaging

3 Class Hours, 3 Quarter Credit Hours

Prerequisites: VET 137 and VET 138 and VET 248 and VET 254 and VET 250

Corequisites: VET 253, VET 258, VET 260, VET 268

This course provides knowledge of the basic concepts of veterinary radiology including x-ray generation, image recording, image handling and processing, positioning and restraint, radiation safety, and special procedures.

VET 253 Veterinary Imaging Laboratory

3 Lab Hours, 1 Quarter Credit Hours

Prerequisites: VET 138 and VET 248 and VET 254 and VET 250 and VET 137

Corequisites: VET 252, VET 258, VET 260, VET 268

This laboratory provides hands-on experience with the entry-level skills for veterinary technicians in radiology including x-ray generation, image recording, image handling, image processing, positioning, restraint, special procedures, and radiation safety.

VET 254 Veterinary Anesthesia and Surgical Nursing and Lab

4 Class Hours, 3 Lab Hours, 5 Quarter Credit Hours

Prerequisites: VET 242 and VET 243 and VET 244 and VET 262 and VET 263

Corequisites: VET 137, VET 138, VET 248, VET 250

This course provides knowledge and practical experience in surgical assisting, postoperative care, and anesthesiology. Topics include anesthesia administration and monitoring, anesthetic and surgical instrumentation, preparation of the surgical patient, preparation of the surgeon and surgical assistant, and postoperative monitoring. Practical experience may include rotations through local veterinary facilities and may occur on days/times other than scheduled class days. Overtime in the lab may occur due to prolonged patient recovery from anesthesia.

VET 258 Veterinary Practicum III

6 Lab Hours, 2 Quarter Credit Hours

Prerequisites: VET 248 and VET 254 and VET 137 and VET 138 and VET 250

Corequisites: VET 252, VET 253, VET 260, VET 268

This is an intermediate practical experience in the application of veterinary technology at an off-campus site which may include a small animal hospital or clinic, equine or large animal ambulatory practice, animal research facility, emergency facility, specialty/referral practice or other approved veterinary facility. Students work under the supervision of a veterinarian or credentialed veterinary technician while observing and assisting members of the veterinary healthcare team. Students will perform intermediate skills found in the AVMA CVTEA Veterinary Technology Student Essential and Recommended Skills List that fall within the job descriptions of the veterinary technicians and support staff employed at the site. Practical experience will include rotations through local veterinary facilities and may occur on days/times other than scheduled class days.

VET 260 Veterinary Management

3 Class Hours, 3 Lab Hours, 4 Quarter Credit Hours

Prerequisites: VET 138 and VET 248 and VET 254 and VET 137 and VET 250

Corequisites: VET 252, VET 253, VET 258, VET 268

This course provides knowledge of economics in veterinary practice, management of veterinary facilities, technician utilization, marketing, use of electronic medical records, human resources, inventory control, malpractice issues, medical emergency management and client communications. Preparation for the VTNE is emphasized.

VET 262 Veterinary Clinical Laboratory Procedures

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: VET 131 and VET 240 and BIO 122

Corequisites: VET 242, VET 243, VET 244, VET 263

This course provides study in the principles and procedures for the veterinary practice laboratory. Topics include veterinary parasitology, microbiology, immunology, hematology, cytology, urinalysis, and blood chemistries.

VET 263 Veterinary Clinical Laboratory Procedures Laboratory

3 Lab Hours, 1 Quarter Credit Hours

Prerequisites: VET 131 and VET 240 and BIO 122

Corequisites: VET 242, VET 243, VET 244, VET 262

This laboratory provides hands-on experience in veterinary clinical laboratory procedures including veterinary parasitology, microbiology, immunology, hematology, cytology, urinalysis, and blood chemistries.

VET 268 Veterinary Practicum IV

6 Lab Hours, 2 Quarter Credit Hours

Corequisites: VET 252, VET 253, VET 258, VET 260

This continuation of VET 258 is a practical experience in the application of veterinary technology at an off-campus site which may include a small animal hospital or clinic, equine or large animal ambulatory practice, animal research facility, emergency facility, specialty/referral practice or other approved veterinary facility. Students work under the supervision of a veterinarian or credentialed veterinary technician while observing and assisting members of the veterinary healthcare team. Students will focus on mastery of skills performed in VET 258. Practical experience will include rotations through local veterinary facilities and may occur on days/times other than scheduled class days.

VET 311 Law and Ethics in Veterinary Medicine

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: VET 322

This course addresses the numerous and specific legal and ethical issues that are commonly faced by veterinary practices and facilities that house animals. Topics will include the laws, rules and regulations governing veterinary medicine, animal care, pharmaceuticals, liability, taxation, financials, clientele, animal rights and general business. Lectures will include the ethics concerning delivery of care, particularly in end-of-life decisions, and moral conduct involving liability issues, employees, the patient/client/doctor relationship, informed consent and appropriate advice given in phone conversations.

VET 312 Human-Animal Bond

4 Class Hours, 4 Quarter Credit Hours

In this course, students will explore our relationships with animals and how those relationships impact us. The course will outline the definition of the human-animal bond, the evolution of this bond, and why it is important to our health and wellbeing. Additionally, students will learn about the grieving process, how to appropriately offer grief counseling to their clients, and support them when making difficult medical decisions. Other topics discussed will include the difference between service animals and emotional support animals, and compassion fatigue within the veterinary industry.

VET 322 Small Animal Internal Medicine

4 Class Hours, 4 Quarter Credit Hours

This course will focus on small animal internal medicine through the study of etiology, pathogenesis, symptoms, diagnosis and treatment of common diseases and conditions involving small animals.

VET 331 Animal Behavior

4 Class Hours, 4 Quarter Credit Hours

The purpose of this course is to gain an understanding of domestic animal behavior. Understanding behavior is vital in preventing and treating behavior problems. Additionally, this course introduces students to tasks expected of a technician working at a veterinary practice where behavior cases are evaluated. Concepts include phone triage, collecting behavioral histories and implementing behavior plans. Animal learning, cognition and basic psychopharmacology will also be covered.

VET 332 Emergency Medicine and Critical Care

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: VET 322

This course will cover advanced principles and theory in small animal emergency and critical care medicine. This course will discuss the triage, presentation and stabilization of the critical patient. Common emergencies will be presented. Specific organ system disorders along with the necessary advanced nursing care required to treat the disorders will be reviewed. Students will learn how to monitor and evaluate these patients and communicate this assessment to the veterinarian.

VET 333 Clinical Animal Nutrition

4 Class Hours, 4 Quarter Credit Hours

This is a course designed to further advance understanding of nutrition and its role in animal health. Topics will include identification and function of nutrients, interpreting pet food labels, prescription diets and their role in therapeutic nutrition of disease, nutrition in all life stages for optimal wellness and communicating this importance to the client.

VET 410 Public Health in Veterinary Medicine

4 Class Hours, 4 Quarter Credit Hours

In this course, students will learn about the role of veterinarians in public health. Emphasis will be on zoonotic diseases, food supply safety, epidemiology of disease and the prevention/control/eradication of public health threats as they pertain to veterinary medicine and animals.

VET 411 Advanced Anesthesia and Pain Management

4 Class Hours, 4 Quarter Credit Hours

This course will build upon the skills learned in introductory anesthesia courses. Students will learn techniques that will help them safely perform anesthesia on more critical patients or patients with more severe pain management considerations. Students will discuss cases and help develop anesthesia and analgesia plans for patients taking into account the physical condition of the patient, disease processes present in the patient, surgical interventions, anticipated complications and analgesic considerations. Discussed skills will include mechanical ventilation, direct arterial blood pressure monitoring, epidurals, local and regional nerve blocks and total injectable anesthesia.

VET 412 Practicum Orientation

2 Class Hours, 2 Quarter Credit Hours

This course prepares VET students for VET 422 Advanced Practicum I. Students will create a resume and pursue a practicum site in their chosen specialty area. Focus will be on identification of facilities that will provide training and tasks in the student's special area of interest.

VET 421 Advanced Dentistry

4 Class Hours, 4 Quarter Credit Hours

This course will focus on learning and applying techniques in dentistry that are appropriate for veterinary technicians. Topics will include dental anatomy, dental charting, recognizing dental pathology, periodontal disease management, dental prophylaxis, periodontics, endodontics, orthodontics and intraoral radiology. Preventive care products and communication with clients will also be discussed.

VET 422 Advanced Practicum 1

12 Lab Hours, 6 Quarter Credit Hours

Prerequisites: VET 412

This is a practical experience in the application of veterinary technology of the student's special area of interest at an off-campus site which may include a small animal hospital or clinic, equine or large animal ambulatory practice, animal research facility, emergency facility, specialty/referral practice or other approved veterinary facility. Students work under the supervision of a credentialed veterinary technician or veterinarian while observing and assisting members of the veterinary healthcare team. A weekly journal of cases seen while at the practicum will be submitted by the student.

VET 423 Practicum Seminar

2 Class Hours, 2 Quarter Credit Hours

This is a weekly practicum seminar based on the experiences and clinical cases that students engage in while performing practical work at their clinical sites. Students participate in a seminar that focuses on the technician's roles and responsibilities in real medical and surgical cases, discussing the medicine, surgery, theory, skills, and ethical questions that arise when managing patients and clients. Students will present case studies and research related topics in veterinary technology.

VET 432 Advanced Practicum II

12 Lab Hours, 6 Quarter Credit Hours

Prerequisites: VET 422

This is a continued practical experience in the application of veterinary technology of the student's special area of interest at an off-campus site which may include a small animal hospital or clinic, equine or large animal ambulatory practice, animal research facility, emergency facility, specialty/referral practice or other approved veterinary facility. Students work under the supervision of a veterinarian or credentialed

VET 433 Advanced Laboratory Animal Medicine

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: (SS 470 or PS 410)

The purpose of this course is to gain an advanced understanding of the role of the veterinary technician in the field of laboratory animal medicine and management. Students will gain knowledge in laboratory animal diseases, laboratory animal care and clinical medicine and welfare of animals used in research. In addition, students will gain an appreciation for the regulatory and facilities aspects of the laboratory animal field.