

Veterinary Technology

VTSC 101 Introduction to Veterinary Technology 3 credits

This course is an introduction to the field and occupation of veterinary technology. Topics include the roles of the veterinary technician and veterinary health care team, veterinary medical terminology, species and breed identification, an overview of animal husbandry, physical exams, and medical record documentation. This course also includes discussion on shelter, wildlife and specialty medicine, the human-animal bond, and euthanasia. This course meets for three lecture hours each week, plus additional animal behavior/socialization/basic training work outside of class.

Pre/Co-requisites: C or higher in the following courses: ENGL 101 English Composition I and MATH 203 College Algebra or higher.

VTSC 201 Veterinary Management 2 credits

This course covers all aspects of veterinary office management. The course exposes the student to the laws and regulations governing veterinary medicine, workplace hazards and safety, client communication and education, veterinary management systems, inventory control, and maintaining proper facility records.

Prerequisites: C or higher in the following courses: ENGL 101 English Composition I, ENGL 102 English Composition II, and VTSC 101 Introduction to Veterinary Technology.

VTSC 211 Veterinary Clinical Methods I 4 credits

This course is an introduction to veterinary clinical skills. Hospital safety including kennel management and sanitation are discussed. Students practice safe handling and restraint of various species of animals with an overview of basic physical examination techniques. Preventative health care and immunity, small animal nutrition, grooming, reproductive cycles, sex determination, and behavior and training are also discussed. Three lecture and three laboratory hours per week plus additional animal behavior/socialization/basic training work outside of class.

Prerequisites: C or higher in the following courses: BIOL 205 Vertebrate Anatomy and Physiology I, VTSC 101 Introduction to Veterinary Technology, and VTSC 232 Veterinary Microbiology.

Pre/Co-requisite: C or higher in VTSC 226 Veterinary Pharmacology.

VTSC 212 Veterinary Clinical Methods II 4 credits

This course is a continuation of VTSC 211 Veterinary Clinical Methods I. The course studies the presentation of common diseases of canines and felines during physical examination. Emphasis is placed on the technician's role in diagnostic procedures, treatments, emergency, and critical care. Technical skills including venipuncture, catheterization, routine laboratory procedures, wound care, bandaging, and nursing care are also emphasized. Three lecture and three laboratory hours per week plus additional animal behavior/socialization/basic training work outside of class.

Prerequisites: C or higher in the following courses: BIOL 205/BIOL 170 Vertebrate Anatomy and Physiology I, BIOL 206/BIOL 171 Vertebrate Anatomy and Physiology II, ENGL 101 English Composition I, ENGL 102 English Composition II, and VTSC 211 Veterinary Clinical Methods I.

VTSC 221 Veterinary Internship I 2 credits

This course is an off-campus practical veterinary experience that expands student knowledge and builds proficiency in skills. Program director approval required.

Prerequisite: successful completion of all Veterinary Technology courses through semester three of the program with minimum grades of C or higher.

Pre/Co-requisites: C or higher in the following courses: VTSC 201 Veterinary Management and VTSC 238 Veterinary Pathology.

VTSC 222 Veterinary Internship II 2 credits

This course is an off-campus practical veterinary experience that expands student knowledge and builds proficiency in skills. Program coordinator approval is required.

Prerequisite: successful completion of all Veterinary Technology courses through semester three of the program with minimum grades of C or higher.

Pre/Co-requisites: C or higher in the following courses: VTSC 221 Veterinary Internship I, VTSC 201 Veterinary Management and VTSC 238 Veterinary Pathology.

VTSC 224 Veterinary Imaging 3 credits

This course introduces the student to principles of veterinary imaging including radiography and ultrasonography. Topics include radiation safety, patient positioning, special studies, and a review of other diagnostic imaging methods including endoscopy, CT, and MRI. Two lecture and two laboratory hours per week.

Prerequisite: C or higher in BIOL 170 Vertebrate Anatomy and Physiology I.

Pre/Co-requisites: C or higher in the following courses: BIOL 171 Vertebrate Anatomy and Physiology II and VTSC 211 Veterinary Clinical Methods I.

VTSC 226 Veterinary Pharmacology 3 credits

This course teaches basic pharmacological principles, including drug classifications, administration, pharmacokinetics and pharmacodynamics; drug packaging, labeling, record keeping, and medical calculations; legal and ethical considerations; and client communication. Three lecture and one laboratory hours per week.

Prerequisites: C or higher in the following courses: BIOL 121 Biological Principles I, BIOL 170 Vertebrate Anatomy and Physiology I, CHEM 151 General Chemistry I, and MATH 158 Introduction to Statistics or higher.

Pre/Co-requisites: C or higher in the following courses: BIOL 171 Vertebrate Anatomy and Physiology II and VTSC 211 Veterinary Clinical Methods I.

VTSC 232 Veterinary Microbiology 4 credits

This is a course in microbiology as it related to veterinary medicine with emphasis placed on the practical applications for medical, food, dairy, water, and environmental microbiology. Part of the laboratory experience includes an introduction to techniques in molecular biology and the identification of one or more bacterial unknowns to demonstrate adequate knowledge of the proper laboratory technique. Organisms of discussion include bacteria, viruses, fungi, and some of the primitive algae and protozoa. Two lecture and four laboratory hours per week.

Prerequisite: C or higher in BIOL 121 Biological Principles I and Pre/Co-Requisite: C or higher in BIOL 170/BIOL 205 Vertebrate Anatomy and Physiology I.

VTSC 233 Veterinary Parasitology 3 credits

This course examines internal and external parasites important to veterinary medicine. Topics include parasite life cycles, pathogenesis, zoonoses, treatment, and prevention. Diagnostic evaluation and identification is also performed. Two lecture and two laboratory hours per week.

Prerequisite: C or higher in BIOL 121 Biological Principles I.

Pre/Co-requisites: C or higher in the following courses: BIOL 205/BIOL 170 Vertebrate Anatomy and Physiology I and VTSC 232 Veterinary Microbiology.

VTSC 235 Large Animal Medicine and Management 3 credits

This course provides an overview of domestic large animals including horses, cattle, and sheep. Topics covered include anatomy and physiology, breed identification, safe handling and restraint, nutrition, common diseases, sample collection, medication administration, and nursing care. Laboratory sessions are conducted off campus. Two lecture and two laboratory hours per week.

Prerequisites: C or higher in the following courses: BIOL 205/BIOL 170 Vertebrate Anatomy and Physiology I, BIOL 206/BIOL 171 Vertebrate Anatomy and Physiology II, and VTSC 211 Veterinary Clinical Methods I.

Pre/Co-requisite: C or higher in VTSC 212 Veterinary Clinical Methods II.

VTSC 236 Laboratory Animals and Exotics 4 credits

This course focuses on animals commonly used in a laboratory setting, as well as exotic pet animals. Emphasis is placed on biology, diseases, and care of various rodents, rabbits, avian, reptiles, and amphibians. Topics include husbandry, restraint, handling, pain and distress, biology and disease, and environmental enrichment. Laws governing the care and ethical use of laboratory animals are also covered, as well as veterinary nursing skills as it applies to laboratory animals and exotics. Laboratory sessions are conducted off campus. Three lecture and two laboratory hours per week.

Prerequisites: C or higher in the following courses: BIOL 205/BIOL 170 Vertebrate Anatomy and Physiology I, BIOL 206/BIOL 171 Vertebrate Anatomy and Physiology II, and VTSC 211 Veterinary Clinical Methods I.

Pre/Co-requisite: C or higher in VTSC 212 Veterinary Clinical Methods II.

VTSC 238 Veterinary Pathology 3 credits

This course examines the nature of disease as it applies to the veterinary medicine. Topics include cell injury and necrosis, inflammation and healing, diseases of body systems, and neoplasia.

Prerequisites: C or higher in the following courses: BIOL 121 Biological Principles I, BIOL 107/205 Vertebrate Anatomy and Physiology I, BIOL 171/ 206 Vertebrate Anatomy and Physiology II, VTSC 211 Veterinary Clinical Methods I, and VTSC 212 Veterinary Clinical Methods II.

VTSC 240 Veterinary Anesthesia & Surgery 4 credits

This course focuses on aseptic preparation of both patient and surgical suite, management of surgical and anesthesia equipment and instruments, injectable and inhalant anesthetics, analgesia, anesthesia induction, maintenance and recovery, common surgical procedures, and anesthetic and surgical complications. Three lecture and three laboratory hours per week.

Prerequisites: C or higher in the following courses: VTSC 211 Clinical Methods I, VTSC 212 Clinical Methods II, and VTSC 226 Veterinary Pharmacology.