

VETERINARY TECHNOLOGY

Rock Creek Campus
Building 7, Room 202
971-722-7461

www.pcc.edu/programs/vet-tech/

CAREER AND PROGRAM DESCRIPTION

Veterinary technicians work with veterinarians and are skilled and knowledgeable in the practical application of aspects involved in the care and handling of animals, clinical laboratory procedures, animal diseases, animal nutrition, pharmacology, radiography, anesthesiology and medical and surgical assistance. Graduates are prepared to function as competent veterinary technicians in small and large animal hospitals and clinics, laboratory animal research facilities, educational institutions, animal shelters, military service and commercial firms. The program also emphasizes the development of professional attitudes and interpersonal skills expected of health care professionals.

This program is fully accredited by the Committee on Veterinary Technician Education and Activities of the American Veterinary Medical Association. Graduates are eligible to take the Veterinary Technician National Examination administered by the Oregon Board of Veterinary Medical Examiners. Graduates are also eligible for licensure in other states.

This is a seven-term, full time program. All Veterinary Technology courses must be taken in the sequential order in the course of study below. All Veterinary Technology courses must be completed with a C or better to qualify for continuation in the program.

DEGREES AND CERTIFICATES OFFERED

Associate of Applied Science Degree

Veterinary Technology

PREREQUISITES AND REQUIREMENTS

College placement tests are administered through assessment centers.

1. Writing skills placement at WR 121 or documented previous college level work.
2. Completing MTH 65, or MTH 63 with a C or better, or passing a math class with a C or better for which MTH 65 or higher level math skills are a prerequisite, or passing the PCC competency exam for MTH 65 or placement into MTH 95 or higher.
3. High school diploma, GED certificate, or equivalent required.
4. Completion of CH 100 Fundamentals of Chemistry, its equivalent or higher with a C or better.
5. Completion of BI 112 Cell Biology for Health Occupations, its equivalent or higher with a C or better.

The Veterinary Technology program is a closed entry program with limited enrollment. Completing admission requirements and applying to the program does not guarantee admission. Admission to the first year of the program is based on high school and college grades, meeting the above program prerequisites, completion of required observation hours with a veterinarian, a letter of recommendation, and an interview. A minimum of forty hours of observation with a veterinarian is required. This may be done as a paid employee or as a volunteer.

For specific eligibility requirements, a complete list of application materials and to obtain an admission packet, contact the department or visit the program website: www.pcc.edu/programs/vet-tech/. In order to be considered for admittance into fall term, all application materials are due by May 1st. Only students who have been officially accepted into the program or those who have prior approval may enroll in courses.

VETERINARY TECHNOLOGY AAS DEGREE

Minimum 104 credits. Students must also meet Associate Degree Comprehensive Requirements and Associate of Applied Science Requirements. Students must complete a total of sixteen credits of General Education. Some courses specified within the program may be used as General Education. Students should consult with program advisors for course planning.

Veterinary Technology Degree Credit Summary

VT	84
Prerequisites	9
Remaining General Education	7
WR	4
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	Credit Total 104

COURSE OF STUDY

The coursework listed below is required. The following is an example of a term-by-term breakdown.

Prerequisites

BI	112	Cell Biology for Health Occupations*	5
CH	100	Fundamentals for Chemistry*	4

First Term

VT	100	Veterinary Medical Terminology	2
VT	101	Introduction to Veterinary Technology	2
VT	121	Basic Animal Science	4
VT	105	Comparative Veterinary Anatomy and Physiology I	4
WR	121	English Composition	4

Second Term

VT	102	Animal Nursing and Restraint	3
VT	107	Veterinary Parasitology and Pathology	3
VT	108	Pharmaceutical Mathematics I	1
VT	106	Comparative Veterinary Anatomy and Physiology II	4
General Education			4

Third Term

VT	103	Animal Health Record Systems	3
VT	110	Specimen Collection Laboratory	1
VT	111	Hematology and Urinalysis	5
General Education			3

Fourth Term

VT	109	Radiation Safety	2
VT	112	Clinical Laboratory Procedures	5
VT	113	Veterinary Microbiology	3
VT	280A	Cooperative Education	4

Fifth Term

VT	201	Anesthesiology	3
VT	204	Applied Radiography	3
VT	205	Veterinary Pharmacology	4
VT	211	Pharmaceutical Mathematics II	1

Sixth Term

VT	202	Surgical Nursing and Lab Animal Procedures	4
VT	207	Public Health and Sanitation	2
VT	208	Small Animal Diseases	4
VT	280B	Cooperative Education	4

Seventh Term

VT	203	Veterinary Procedures Seminar	3
VT	209	Large Animal Diseases and Procedures	3
VT	210	Animal Nutrition	3
VT	280C	Cooperative Education	4

**Could be used as General Education*

COURSE DESCRIPTIONS

VT 100 Veterinary Medical Terminology 2.00 Covers medical word parts, abbreviations and basic terms along with a basic knowledge of word construction are taught. Program admission or instructor permission required.

VT 101 Introduction to Veterinary Technology 2.00 Covers the job of the veterinary technician. This will illustrate that the course work is both practical and necessary. Program admission required.

VT 102 Animal Nursing and Restraint 3.00 Teaches nursing techniques and principles of restraint of dogs, cats, horses, cattle, sheep, birds and laboratory animals. Emphasizes techniques to maximize the safety aspect of restraint to both the handler and to the animal patient. Program admission required. Prerequisite: VT 101.

VT 103 Animal Health Record Systems 3.00 An introduction to veterinary medical records, admitting procedures, history taking, record maintenance for both in/out patient, and kennel records. Includes follow-up and discharge procedures on filing and record retention. Covers using the computer in veterinary medicine.

VT 105 Comparative Veterinary Anatomy and Physiology I 4.00 Covers the form and function of animal bodies and their anatomical and physiological differences between selected species are studied. Lab includes skeletons and cadaver specimens. Focuses on microscopic anatomy and anatomy and physiology of bones, muscles, and skin. Program admission required. Prerequisites: VT 121; (BI 101 or BI 101B); CH 100.

VT 106 Comparative Veterinary Anatomy and Physiology II 4.00 Covers the form and function of animal bodies and their anatomical and physiological differences between selected species are studied. Lab includes skeletons and cadaver specimens. Focuses on anatomy and physiology of the digestive, nervous, urinary, reproductive, and endocrine system. Includes organs of special sense. Prerequisite: VT 105.

VT 107 Veterinary Parasitology and Pathology 3.00 Introduces life cycles, modes of transmission, geographical distribution, and diseases associated with each parasite. Lab includes identification of parasites using prepared slides and collected specimens. Students will be able to recognize terms and processes involved in veterinary pathology, means and processes that result in disease, types of cells and tissues, and recognize signs of inflammation. Prerequisites: BI 101, BI 102 or BI 112.

VT 108 Pharmaceutical Mathematics 1 1.00 Introduces mathematics as applied to pharmacology. Includes unit conversions, solutions and percentage calculations, and drug dosage calculations. Program admission required.

VT 109 Radiation Safety 2.00 Introduces x-radiation and safety principles involved in using of x-ray machines. Program or current employment in a veterinary hospital or clinic doing x-ray work is required.

VT 110 Specimen Collection Laboratory 1.00 Covers collection techniques used on both large and small animals and skills needed to obtain the specimens required for analysis in clinical laboratories. Prerequisites: VT 105; (BI 101 or BI 101B), BI 102; CH 100.

VT 111 Hematology and Urinalysis 5.00 Develops the knowledge and skills necessary to perform hematology and urinalysis. Includes how to perform a complete blood count and to do a urinalysis using current technology. Prerequisites: VT 105; (BI 101 or BI 101B), BI 102; CH 100.

VT 112 Clinical Laboratory Procedures 5.00 Teaches the knowledge and skills necessary to perform the various types of tests that are usually done in the clinical laboratory of a veterinary hospital. Includes learning to perform serum chemistries on various types of machines, knowledge of special commercial test procedures, and examination of cytology specimens. Prerequisites: VT 105, 106, 111; (BI 101 or BI 101B), BI 102; CH 100.

VT 113 Veterinary Microbiology 3.00 Develops the knowledge and skills necessary to perform microbiology functions. Includes learning about the various pathological genus and species of bacteria, fungi, and viruses. Focuses on the various laboratory methods used in the identification of bacterial and fungal organisms. Prerequisites: VT 105, 106, 111; (BI 101 or BI 101B), BI 102; CH 100.

VT 121 Basic Animal Science 4.00 Introduces the livestock industry and the various species of large animal livestock. Includes livestock terminology, breeds, production systems, basic management practices, and animal products and by-products. Lab introduces the livestock production systems and producers.

VT 150 Veterinary Technician National Examination Prep Course 4.00 Designed for veterinary assistants currently working in the field to prepare for the Veterinary Technician National Examination (VTNE). Emphasizes subject areas covered on the exam. Material presented provides foundation knowledge in animal health care principles and practice for those wishing to further their education.

VT 201 Anesthesiology 3.00 Introduces basic anesthetic agents, the use and operation of allied machines, monitoring and care of the anesthetized animal patient, and the pre-operative considerations and duties for both surgery and anesthesia. Second year standing required. Prerequisites: VT 105, 106, 111, 112, 113.

VT 202 Surgical Nursing and Lab Animal Procedures 4.00 Surgical Nursing and Lab Animal Procedures Covers surgical preparations of the patient, surgical monitoring, surgical assistance, pre-operative and post-operative animal care, instrument sterilization methods, instrument identification, and the veterinary technicians role in special surgical procedures. Also includes laboratory animal diseases and procedures. Prerequisite: VT 201.

VT 203 Veterinary Procedures Seminar 3.00 Covers the special skill areas of technician training, such as electrocardiography, bandaging, and various diagnostic and therapeutic procedures. Students investigate, research and report (both orally and in writing) on topics of special interest. Prerequisite: VT 202.

VT 204 Applied Radiography 3.00 Teaches the practical application of radiography in the veterinary profession. Includes principles of x-ray production, the operation and uses of x-ray machines, the care and development of films, and radiographic positioning of animals. Prerequisites: VT 105, 106, 109.

VT 205 Veterinary Pharmacology 4.00 Introduces general pharmacological principles, drugs, and classification of agents used in veterinary medicine. Prerequisites: VT 105, 106, 107, 108, 111, 112, 113.

VT 207 Public Health and Sanitation 2.00 Covers the principles of public health and sanitation as they apply to veterinary medicine and the veterinary technician. Emphasizes epidemiology, public health principles and regulations, zoonoses, and meat and food hygiene. Prerequisites: VT 111, 112, 113.

VT 208 Small Animal Diseases 4.00 Covers important diseases and disease processes occurring in small animals are covered. Includes the causes, pathogenesis, clinical signs, treatment and prevention of each disease. Prerequisites: VT 105, 106, 111, 205, 112, 113.

VT 209 Large Animal Diseases and Procedures 3.00 Covers the important disease and disease processes, and obstetrics as they occur in large animals. Includes the causes, pathogenesis, clinical signs, treatment and prevention of each disease. Lab includes large animal treatment procedures. Prerequisites: VT 105, 106, 111, 205, 112, 113.

VT 210 Animal Nutrition 3.00 Introduces various types of nutrients, the basic principles of nutrition as applied to small and large animals, various feeding practices and their economic importance, and important nutritionally caused diseases. Covers care and handling of orphaned animals and special prescription diets. Prerequisites: VT 105, 106, 121; (BI 101 or BI 101B), BI 102; CH 100.

VT 211 Pharmaceutical Mathematics II 1.00 Continues mathematics as applied to pharmacology from Pharmaceutical Mathematics I. Includes a review of drug dosage calculations and solutions and percentages, except problems are more difficult. New topics covered are fluid therapy and cancer chemotherapy problems. Program admission or prerequisite Pharmaceutical Mathematics I required.

VT 280A Cooperative Education: Clinic I 4.00 Develops career objectives by linking their PCC course work with off-campus learning experiences in business, industry, and/or the public sector. Focuses on office/receptionist skills, animal nursing and restraint, and laboratory procedures. Department permission required.

VT 280B Cooperative Education: Clinic II 4.00 Develops career objectives by linking their PCC course work with off-campus learning experiences in business, industry, and/or the public sector. Focuses on office/receptionist skills, animal nursing and restraint laboratory procedures, pharmacology, radiography, surgical preparation and assistance and anesthesiology. Students may request to attend a special clinic, such as the Oregon Regional Primate Center, Oregon Health Science University, The College of Veterinary Medicine at Oregon State University, or a large animal or equine practice. Department permission required.

VT 280C Cooperative Education: Clinic III 4.00 Develops career objectives by linking their PCC course work with off-campus learning experiences in business, industry, and/or the public sector. Focuses on office/receptionist skills, animal nursing and restraint laboratory procedures, pharmacology, radiography, surgical preparation and assistance and anesthesiology. Students may request to attend a special clinic, such as the Oregon Regional Primate Center, Oregon Health Science University, The College of Veterinary Medicine at Oregon State University, or a large animal or equine practice. Department permission required.