

Area of Interest: Health Sciences

## Veterinary Technician

Ontario College Diploma

Program Code: 6320X01FWO

2 Years

Ottawa Campus

### Our Program

**Transform learning into making a difference on a veterinary health care team.**

The two-year Veterinary Technician Ontario College Diploma program prepares you to enter the Veterinary profession by offering an authentic learning experience working alongside highly credentialed professionals in our on-campus veterinary medical facility and in our partnering facilities in the local community.

You benefit from learning in the 10,100 square-foot Veterinary Learning Centre and Clinic. This facility includes a reception area, exam rooms, husbandry area, surgical suite, dental suite, radiography room and more. The Veterinary Learning Center and Clinic is similar to a real-life small animal clinic, enabling you to have an on-campus learning experience using the equipment you would also use in the field.

As a student, you have the unique opportunity to provide medical care to shelter animals and help prepare them for adoption. While in the program, you become a vital member of the veterinary health care team, developing and acquiring valuable knowledge and skills that can then be applied to a variety of areas within the Veterinary Learning Centre and Clinic. This includes:

- physical exams and patient care
- preparing and administering medication
- specimen collection and sample analysis
- surgical assisting and anesthesia
- producing diagnostic radiographs
- providing nutritional support

Additional benefits of this program are its numerous accreditations. The Veterinary Technician program is accredited by the College of Veterinarians of Ontario, the Canadian Veterinary Medical Association, the Ontario Association of Veterinary Technicians; certified by the Canadian Council on Animal Care; and registered with the Ontario Ministry of Agriculture, Food and Agribusiness. Graduates are eligible for consideration for registration by the Ontario Association of Veterinary Technicians and by the Canadian Association for Laboratory Animal Science.

This challenging yet rewarding program offers quality academics and practical experiences, which provide a solid foundation for graduates who are entering various career paths within the exciting veterinary technician profession. Graduates of this program may find employment in a variety of professional settings, which include:

- small, large, or mixed animal veterinary practices
- animal shelters
- veterinary pharmaceutical companies
- medical equipment and nutritional sales
- zoological parks and wildlife facilities

- research facilities
- provincial and federal government agencies
- postsecondary institutions and regulatory bodies

## Employment

Graduates may find employment as veterinary technicians in small, large, or mixed animal veterinary practices, humane societies, veterinary pharmaceutical, medical equipment and nutrition industries, zoological parks, university and research facilities and provincial and federal government agencies.

## Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Perform basic patient examinations and collect data on vital signs.
- Restrain and manage small animals in clinical situations.
- Administer medications by common drug routes and prepare pharmaceuticals as prescribed by a veterinarian.
- Prepare anesthetic delivery systems, induce anesthesia, and monitor patients under anesthesia.
- Prepare and maintain the surgical area and assist during surgical procedures.
- Perform dental prophylactic procedures on dogs and cats.
- Produce standard diagnostic radiographs.
- Collect and process samples for diagnostic laboratory work.
- Perform common veterinary diagnostic tests, such as blood chemistries, differentials, culture and sensitivities and EKGs.
- Perform basic veterinary practice management including computer applications.
- Recognize behavioural signs of small animals.
- Counsel clients especially in the area of pet nutrition.
- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

## Program of Study

Level: 01	Courses	Hours
ENL1813S	Communications 1	42.0
VET1101	Animal Care and Etymology	42.0
VET1102	Comparative Anatomy and Physiology I	70.0
VET1103	Information Technology in Veterinary Practice	14.0
VET1104	Ethology	28.0
VET1125	Essentials of Veterinary Mathematics	14.0

VET1127	Clinical Practices I	14.0
VET1128	Ethics and Animal Welfare	28.0
VET1129	Fundamentals of Laboratory Procedures	70.0
<b>Level: 02</b>	<b>Courses</b>	<b>Hours</b>
GED2012	Achieving Success in the 21st Century	42.0
VET1204	Clinical Mathematics	14.0
VET1205	Veterinary Pharmacology	42.0
VET1206	Veterinary Radiography	14.0
VET1207	Surgical and Anesthetic Principles I	42.0
VET1208	Comparative Animal Anatomy and Physiology II	70.0
VET1210	Clinical Practices 2	70.0
VET1211	Small and Large Animal Parasitology	70.0
<b>Level: 03</b>	<b>Courses</b>	<b>Hours</b>
ENL5501	Professional Communication Skills for Veterinary Technicians	42.0
ENV0002	Environmental Citizenship	42.0
VET1309	Veterinary Dentistry	14.0
VET1310	Clinical Chemistry	14.0
VET1311	Surgical and Anesthetic Principles 2	42.0
VET1315	Animal Nutrition	28.0
VET1316	Clinical Practices 3	112.0
VET1317	Clinical Pathology	56.0
<b>Level: 04</b>	<b>Courses</b>	<b>Hours</b>
VET1401	Laboratory & Exotic Animal Care	42.0
VET1412	Advanced Diagnostic Imaging	28.0
VET1414	Large Animal Medicine	28.0
VET1419	Emergency Medicine and Critical Care	42.0
VET1421	Clinical Practices 4	112.0
VET1423	Veterinary Practicum	244.0
VET1424	Veterinary Practice Management	28.0
<b>Choose one from equivalencies:</b>	<b>Courses</b>	<b>Hours</b>
GED6320	General Education Elective	42.0

## **Fees for the 2025/2026 Academic Year**

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at <http://www.algonquincollege.com/fee-estimator>

Further information on fees can be found by visiting the Registrar's Office website at <http://www.algonquincollege.com/ro>

Fees are subject to change.

## **Admission Requirements for the 2026/2027 Academic Year**

### **College Eligibility**

- Ontario Secondary School Diploma (OSSD) or equivalent; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program). Eligibility may be determined by academic achievement testing, for which a fee will be charged.

### **Program Eligibility**

- English, Grade 12 (ENG4C or equivalent) with a grade of 70% or higher.
- Mathematics, Grade 12 (MAP4C or equivalent) with a grade of 70% or higher.
- Biology, Grade 11 or 12 with a grade of 70% or higher.
- Chemistry, Grade 11 or 12 with a grade of 70% or higher.
- Applicants with international transcripts must provide proof of the subject specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).
- IELTS-International English Language Testing Service (Academic) Overall band of 6.5 with a minimum of 6.0 in each band; OR TOEFL-Internet-based (iBT)-overall 88, with a minimum of 22 in each component: Reading 22; Listening 22; Speaking 22; Writing 22; OR Duolingo English Test (DET) Overall 120, minimum of 120 in Literacy and no score below 105.

Required upon entry into the program, accepted applicants must obtain a series of pre-exposure rabies vaccines through Algonquin Health Services.

Upon completion of all required vaccines, students will be required to provide Immunization Certificate to Paramed as proof of the pre-exposure Rabies Vaccines, adequate titre results and proof of a Tetanus Vaccine within the last 10 years. These requirements need to be met prior to proceeding to level 2 of the program. Level 3 students will be required to provide proof of a protective rabies titer within the first 2 weeks of level 03 of the program. The vaccine requirements are mandatory as it allows the student to safely participate in clinical labs and field placements. Senior students are required to obtain booster vaccinations and titres at their own expense.

All applicants are expected to own a laptop with a functioning camera and microphone, be computer proficient and have a working knowledge of Microsoft Office Suite.

Applicants coming directly out of Secondary School are encouraged to take the Pre-Health Sciences Pathways to Certificates and Diplomas program in the Health Foundations Department or the Veterinary Assistant Program prior to taking the Veterinary Technician program.

## **Admission Requirements for 2025/2026 Academic Year**

### **College Eligibility**

- Ontario Secondary School Diploma (OSSD) or equivalent. Applicants with an OSSD showing senior English and/or Mathematics courses at the Basic Level, or with Workplace or Open courses, will be tested to determine their eligibility for admission; OR
- Academic and Career Entrance (ACE) certificate; OR

- General Educational Development (GED) certificate; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program). Eligibility may be determined by academic achievement testing for which a fee will be charged.

**Program Eligibility**

- English, Grade 12 (ENG4C or equivalent) with a grade of 70% or higher.
- Mathematics, Grade 12 (MAP4C or equivalent) with a grade of 70% or higher.
- Biology, Grade 11 or 12 with a grade of 70% or higher.
- Chemistry, Grade 11 or 12 with a grade of 70% or higher.
- Applicants with international transcripts must provide proof of the subject-specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).
- IELTS-International English Language Testing Service (Academic) Overall band of 6.5 with a minimum of 6.0 in each band; OR TOEFL-Internet-based (iBT)-overall 88, with a minimum of 22 in each component: Reading 22; Listening 22; Speaking 22; Writing 22; OR Duolingo English Test (DET) Overall 120, minimum of 120 in Literacy and no score below 105.

Not sure if you meet all of the requirements? Academic Upgrading may be able to help with that: <https://www.algonquincollege.com/access/>.

Required upon entry into the program, accepted applicants must obtain a series of pre-exposure rabies vaccines through Algonquin Health Services.

Upon completion of all required vaccines, students will be required to provide Immunization Certificate to Paramed as proof of the pre-exposure Rabies Vaccines, adequate titre results and Tetanus Vaccine. These requirements need to be met prior to proceeding to Level 02 of the program. Level 03 students Will be required to provide proof of a protective rabies titer within the first week of Level 03 of the program. The vaccine requirements are mandatory as it allows the student to safely participate in clinical labs and field placements. Students are required to obtain vaccinations and titres at their own expense (approximately \$800).

All applicants are expected to own a laptop, be computer proficient and have a working knowledge of Microsoft Office Suite.

Applicants coming directly out of Secondary School are encouraged to take the Pre-Health Sciences Pathways to Certificates and Diplomas program in the Health Foundations Department or the Veterinary Assistant Program prior to taking the Veterinary Technician program.

**Application Information****VETERINARY TECHNICIAN**  
**Program Code 6320X01FWO**

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca  
60 Corporate Court  
Guelph, Ontario N1G 5J3  
1-888-892-2228

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at <http://www.ontariocolleges.ca/>

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information:

<https://algonquincollege.my.site.com/myac360/s/self-registration-page> .

For further information on the admissions process, contact:

Registrar's Office  
Algonquin College  
1385 Woodroffe Ave  
Ottawa, ON K2G 1V8  
Telephone: 613-727-0002  
Toll-free: 1-800-565-4723  
TTY: 613-727-7766  
Fax: 613-727-7632  
Contact: <https://www.algonquincollege.com/ro>

## **Additional Information**

As an accredited College, a graduate is eligible to become a Registered Veterinary Technician (RVT). The Ontario Association of Veterinary Technicians designates this credential to those graduates who meet specific criteria. Registration requirements for RVTs are found at the Ontario Association of Veterinary Technicians website. They include but are not limited to, the following:

- Graduate from an OAVT accredited college.
- Successfully complete the registration examination.
- Complete the OAVT Professionalism and Ethics Workshop.
- Submit a clear Police Criminal Records Check.

The Veterinary Technician program highly recommends that all applicants review the OAVT areas of expertise for Registered Veterinary Technicians. This is available at <http://www.oavt.org/> .

It is strongly recommended that applicants have previous experience working with animals or become familiar with the Veterinary Technician profession before entering the program. Applicants are also advised that holiday, weekend, early morning and evening-hour assignments are to be expected as the students are responsible for the care of the animals and the cleaning of the facilities seven days a week. This takes place before and after regular class hours. The program contains extensive team/group work. Students must be as comfortable working in a team environment as they are working independently.

The minimum passing grade for the core theory courses in this program is 60%. The minimum passing grade for the practical clinical sessions in this program is 70%. All clinical practice and scheduled labs are mandatory. Absences negatively affect the final grade and may result in the student not being permitted to progress in the course should they be absent for 20% or more of the scheduled lab time. Students can have a maximum of one failure in a given course. Students failing a core course for the second time are permanently withdrawn from the program with no chance to reapply. Should a student earn a failing grade, however, satisfy the criteria for being granted a supplemental privilege, they are permitted a maximum of two supplemental exams for each semester they are registered in the program. Students who fail three courses in one semester are not eligible for supplemental exams and are withdrawn from the program for one year. Students who are unsuccessful in a Level 01 course must reapply through [ontariocolleges.ca](http://ontariocolleges.ca) to be considered to return full-time to the program. Off cycle students who are looking to return to the program in Level 02, 03 or 04 are to contact the Program Coordinator and submit a request to be considered to return.

All Level 01, 02, 03 and 04 courses must be successfully completed to progress on to VET1423 - Veterinary Practicum.

Further details on how a student can progress through the program can be found in the Veterinary Technician Program Student Handbook which is accessible to students registered in the Veterinary Technician Program.

## **Contact Information**

### **Program Coordinator(s)**



- Shannon Reid, <mailto:reids@algonquincollege.com> , 613-727-4723, ext. 2971

## **Course Descriptions**

### **ENL1813S Communications 1**

Communication remains an essential skill sought by employers, regardless of discipline or field of study. Using a practical, vocation-oriented approach, students focus on meeting the requirements of effective communication. Through a combination of lectures, exercises, and independent learning, students practise writing, speaking, reading, listening, locating and documenting information and using technology to communicate professionally. Students develop and strengthen communication skills that contribute to success in both educational and workplace environments.

Prerequisite(s): none

Corerequisite(s):none

### **ENL5501 Professional Communication Skills for Veterinary Technicians**

Strong oral and written communication skills are essential to veterinary technicians working in clinical practices, research facilities, and community or rescue organizations. Using a variety of workplace scenarios, students develop and practise the written and oral skills they need to communicate confidently and effectively with the public and other members of the veterinary team. The importance of critical thinking in a medical profession is also explored, and students are given ample opportunity to enhance and apply their critical-thinking skills.

Prerequisite(s): ENL1813S (2) and VET1101

Corerequisite(s):none

### **ENV0002 Environmental Citizenship**

Environmental citizenship is based on the principles of national citizenship, yet it goes beyond political borders to emphasize global environmental rights and responsibilities. An environmental citizen is committed to learning more about the environment and to taking responsible environmental action. Through a combination of interactive activities, assignments and discussions, students learn how they are personally connected with current environmental issues. Students are also encouraged to adopt attitudes and behaviours that foster global environmental responsibility.

Prerequisite(s): none

Corerequisite(s):none

### **GED2012 Achieving Success in the 21st Century**

Rapid changes in technology have created new employment and business opportunities that challenge each of us to find our place as citizens in the emerging society. Life in the 21st century presents significant opportunities, creates potential hazards and demands that we face new responsibilities in ethical ways. Students explore the possibilities ahead, assess their own aptitudes and strengths, and apply critical thinking and decision-making tools to help resolve some of the important issues present in our complex society with its competing interests.

Prerequisite(s): none

Corerequisite(s):none

### **GED6320 General Education Elective**

Students choose one course, from a group of general education electives, which meets one of the following five theme requirements: Arts in Society, Civic Life, Social and Cultural Understanding, Personal Understanding, and Science & Technology.

Prerequisite(s): none

Corerequisite(s):none

### **VET1101 Animal Care and Etymology**

Registered Veterinary Technicians play a vital role in the animal health care industry with their knowledge of and adherence to expected professional standards. Students are introduced to the provincial and national veterinary professionals organizations and regulatory standards. Topics include canine and feline life stages, common breeds, preventative medicine, disease control, human-animal bond and end of life care. The One Health concept is studied with a focus on global emerging zoonotic disease and community veterinary initiatives. In this course, students experience in class discussions, presentations and guest speakers with specialized industry experience. A medical vocabulary foundation is provided through online activities.

Prerequisite(s): none

Corerequisite(s):none

### **VET1102 Comparative Anatomy and Physiology I**

A comparative approach to the anatomy and physiology of the skeletal, muscular, digestive and nervous systems of common domestic animals is explored in theory and laboratory settings. The structure and function of cells, including the microscopic study of gross and histological specimens of these body systems, is provided. Laboratory sessions may include dissections. Common pathological conditions affecting these organ systems are reviewed.

Prerequisite(s): none

Corerequisite(s):none

### **VET1103 Information Technology in Veterinary Practice**

The use of media and medical data management software is an essential skill for veterinary professionals. Students become proficient with the use of Avimark, a commonly used veterinary practice software. Skills acquired include client and staff scheduling, booking appointments, client file setup, updating medical records, integration of lab results, inventory control and price lists, estimate and invoice generation, completion of transactions and budget analysis. Competency in Microsoft Office is reviewed. Use of social media and telemedicine in veterinary medicine is discussed.

Prerequisite(s): none

Corerequisite(s):none

### **VET1104 Ethology**

Thorough understanding of animal behaviour and communication is required to work safely, knowledgeably, and effectively with patients and clients. This course introduces animal evolution, domestication and the physiological, environmental and developmental basis of behaviour. Common normal and abnormal manifestations of behaviour in domestic animal species are explored. Approaches regarding prevention, basic training tools and various treatments to correct undesirable behaviours are described. Students will have the opportunity to apply their knowledge in the on campus veterinary clinic throughout the duration of the program.

Prerequisite(s): none

Corerequisite(s):none

### **VET1125 Essentials of Veterinary Mathematics**

Veterinary technicians require a solid foundation in basic math concepts for accuracy in patient medical care and treatment. Students review fractions, percentages, ratios, metric conversions, household measurement systems and scientific notation. Students perform basic applied calculations related to drug dosages, laboratory results, radiology, and nutrition. Correct rounding techniques and syringe choices for volumetric drug doses are explained and practiced.

Prerequisite(s): none

Corerequisite(s):none

### **VET1127 Clinical Practices I**

Fundamental practical skills used by the veterinary technician in clinical practice are introduced in



this hands-on course. With the use of animal models, students acquire proficiency in small animal restraint and medication administration techniques including oral, ophthalmic, aural and injectable routes. The importance of safe, low stress approaches to animal handling is emphasized. Activities include dose calculations and medical record keeping.

Prerequisite(s): none  
Corerequisite(s):none

### **VET1128 Ethics and Animal Welfare**

Ethics and ethical decisions as they relate to professional practice, animal welfare, and current legislation are the focus of this critical thinking based course. Students gain an understanding of the complexity of ethical, legal and animal welfare concerns that occur in society and veterinary practice. The course aims to provide students with an ethical decision-making framework which can be applied to commonly encountered issues and integrated into daily professional practice. Through case studies, scenarios and group discussions, students use the framework introduced to develop an informed opinion and make an ethically sound decision when examining animal welfare issues.

Prerequisite(s): none  
Corerequisite(s):none

### **VET1129 Fundamentals of Laboratory Procedures**

Theoretical and practical aspects of diagnostic tests routinely performed in veterinary medicine are provided. Students become familiar with the parts of the microscope and proficient in its use. Common disease-causing microbial agents (bacterial, viral, protozoal, prion and fungal) are studied and identified through the performance of diagnostic testing. Other tasks performed include determining packed cell volume, total protein and basic urine parameters. Students develop proficiency with producing technically correct blood smears and staining. The importance of regular equipment maintenance and quality control is emphasized and practised.

Prerequisite(s): none  
Corerequisite(s):none

### **VET1204 Clinical Mathematics**

Building on the Essentials of Veterinary Mathematics, this course helps students develop a proficiency with some of the more advanced calculations required of veterinary technicians. Through the completion of in-class problems and assigned practice questions, students calculate patient intravenous (IV) fluid rates and constant rate infusions and learn how to prepare various chemical solutions. Graphing techniques used in veterinary medicine are also explored and an overview of statistics provided.

Prerequisite(s): VET1125  
Corerequisite(s):none

### **VET1205 Veterinary Pharmacology**

Students study the foundation of pharmacokinetics, pharmacodynamics as well as principles and methods of administration in this course. The most commonly used drugs in veterinary medicine are presented in relation to body system or drug category. These include neuromuscular, cardiopulmonary, gastrointestinal, urinary, hormonal, behavioural, anti-inflammatory, analgesic, chemotherapeutic, antiparasitic and antimicrobial drugs. Mode of action, adverse effects, drug resistance and client education are emphasized. Important legislative regulations and legal responsibilities, as they relate to the safe dispensing of pharmaceuticals in the veterinary environment, are discussed and practised.

Prerequisite(s): VET1101 and VET1102 and VET1125  
Corerequisite(s):none

### **VET1206 Veterinary Radiography**

Producing diagnostic radiographs is critical for assisting veterinarians with making accurate patient diagnoses. In addition to the physics of radiation, students in this course learn how to evaluate radiographic quality and position patients correctly for various anatomical areas of interest. Students become acquainted with the regulations that guide the use of x-ray machines and radiation safety emphasized.

Prerequisite(s): VET1102  
Corerequisite(s):none

### **VET1207 Surgical and Anesthetic Principles I**

The role Registered Veterinary Technicians play in the surgical environment is multifaceted and requires extensive knowledge of asepsis, surgical procedures and anesthesia. In this course students learn fundamentals of anesthesiology, including the pre-anesthetic patient workup, anesthetic agents used in veterinary practice, endotracheal intubation and the structure and functions of anesthetic machine. Students also learn to recognize the equipment used in the surgical suite, the importance of sterility and the various ways that Registered Veterinary Technicians can support the veterinary surgeon.

Prerequisite(s): VET1101 and VET1102 and VET1125 and VET1127  
Corerequisite(s):VET1210

### **VET1208 Comparative Animal Anatomy and Physiology II**

Students take a comparative approach to the anatomy and physiology of the cardiovascular, respiratory, urinary, reproductive, endocrine, integumentary system and special senses of avian, small and large animal species. Students discuss common pathological conditions affecting these organ systems. Laboratory sessions involve dissections and the use of microscopes to examine histological specimens.

Prerequisite(s): VET1102  
Corerequisite(s):none

### **VET1210 Clinical Practices 2**

In this skill-based course, the practical application of patient health assessments, medication administration, medical documentation, sample collection, radiography, anesthetic systems, anesthetic monitoring and surgical assisting skills is studied, practised and evaluated. Students learn and perform the skills required to produce a diagnostic radiograph, including positioning, exposure settings and labeling techniques. Students gain the knowledge required to select the anesthetic system appropriate for their specific patient as a variety of anesthetic breathing circuits and machines are studied and used. Aseptic technique is studied and performed in all areas of the surgical suite including how to wrap surgical packs, prepare surgical instruments for use and how to gown and glove when assisting in surgery. Students are responsible for the care of patients on campus and in clinic. Animal care hours include early morning, noon, evening, weekend and holiday rotations outside of regularly scheduled class hours. Expectations and responsibilities regarding professionalism, work ethic and communications are emphasized and evaluated.

Prerequisite(s): VET1101 and VET1102 and VET1103 and VET1104 and VET1125 and VET1127 and VET1128 and VET1129  
Corerequisite(s):VET1207

### **VET1211 Small and Large Animal Parasitology**

One of the steps towards promoting animal health, and the health of the humans with whom they coexist, is ensuring that animals are free from parasitic infections. Through the acquisition of theoretical principles, and the application of those theories in a laboratory setting, students will become proficient at testing for and recognizing small and large animal endoparasites and ectoparasites. An understanding of how each parasite is transmitted will also be gained.

Prerequisite(s): VET1102 and VET1129  
Corerequisite(s):none

**VET1309 Veterinary Dentistry**

Dental health has a significant impact on the patient's overall well-being and Registered Veterinary Technicians can make remarkable improvements to a pet's quality of life when they provide dental care. Students will study dental anatomy, medical conditions, malocclusions and how each is treated. The dental prophylaxis procedure and importance of performing radiographs when assessing oral health is emphasized. Students develop an understanding of local oral anesthetic blocks and what is involved when a Veterinarian performs extractions and common orthodontic procedures. At the completion of this theory course, students will fully understand comprehensive oral health assessment and treatment.

Prerequisite(s): VET1204 and VET1206 and VET1207 and VET1208

Corerequisite(s):none

**VET1310 Clinical Chemistry**

Biological sample analysis is an important aspect of diagnosing disease. In this theory course, students study the collection, handling and analytical skills to help yield accurate and precise test results. These skills, along with the ability to determine the significance of the tests results are developed specifically in the areas of serum chemistries, electrolytes, acid-base, and cerebral spinal fluid.

Prerequisite(s): VET1129 and VET1208

Corerequisite(s):none

**VET1311 Surgical and Anesthetic Principles 2**

Anesthetic monitoring is explored in detail in this course and the monitoring of anesthesia for high risk patients will be investigated. Common surgical procedures in small animal veterinary hospitals are covered, along with pain management, electrocardiography, and fluid therapy. Students apply the knowledge gained from this course in the surgical labs in Clinical Practices 3.

Prerequisite(s): VET1207 and VET1208 and VET1210

Corerequisite(s):VET1316

**VET1315 Animal Nutrition**

A patient's nutritional profile is an important consideration when assessing their overall health and quality of life. Students learn the nutritional requirements of large and small animals at various life stages including specific dietary needs of ill and recovering patients. Through evaluating and comparing a variety of veterinary diets, students gain the knowledge to accurately assess patients' nutritional needs and potential disease state, then accurately counsel clients, helping them to make informed diet selections for their pet. The Veterinary Team plays a key role in providing client education regarding clinical nutrition.

Prerequisite(s): none

Corerequisite(s):none

**VET1316 Clinical Practices 3**

Within a veterinary facility, veterinary technicians perform a variety of medical procedures in the interest of animal health. Throughout this course, students acquire and perform skills with small animal patients in the areas of anesthesia, surgical assisting, dental prophylaxis, radiography, sample collection and analysis, patient assessment and medication administration. With the support of our community partners, students rotate through on and off-site veterinary facilities to gain valuable hands-on experience.

Prerequisite(s): VET1204 and VET1205 and VET1206 and VET1207 and VET1208 and VET1210 and VET1211

Corerequisite(s):VET1311

**VET1317 Clinical Pathology**

Analyzing blood, urine and cytological specimens are key indicators to diagnosing and treating diseases and Registered Veterinary Technicians are vital in identifying abnormalities. In a theory and laboratory setting, students study the significance of the urinalysis and the normal and abnormal maturation sequence and morphology of blood cells in bone marrow and peripheral blood, including red blood cell, white blood cells and platelets as part of a diagnostic work up. In addition, students will review exfoliative and aspiration cytology including reproductive, exudates, transudates, and malignant samples. By the end of this course, students are able to perform complete blood counts and full urinalysis, recognizing normal and abnormal findings, and provide a report for the Veterinarian and patients' medical record.

Prerequisite(s): VET1129 and VET1208  
Corerequisite(s):none

### **VET1401 Laboratory & Exotic Animal Care**

The veterinary technician has a vital role in the care of laboratory animals within research settings as well as exotic pets in the private sector. These animals need specialized care and handling as well as unique husbandry requirements. Students learn the principles of caring for laboratory and exotic animal species and the standards of working in a regulatory environment within an animal research facility. This course involves studying the current Canadian legislation including the Animals for Research Act and the guidelines published by the Canadian Council on Animal Care (CCAC). Ethical issues surrounding laboratory animals are discussed and addressed.

Prerequisite(s): VET1316  
Corerequisite(s):none

### **VET1412 Advanced Diagnostic Imaging**

Advanced imaging technologies are commonly used in veterinary medicine to provide comprehensive patient diagnostics and are routinely accessible through specialty and referral practices. In this course, students will study various imaging techniques, their principles, applications, image acquisition and interpretation of results. Imaging modalities explored through case studies, research and discussions include equine, avian and exotic animal digital radiography, small and large animal contrast studies, fluoroscopy, computed tomography, magnetic resonance imaging, nuclear medicine, ultrasonography and endoscopy. Students enhance their knowledge in imaging and analytical skills by exploring the integration of Artificial Intelligence applications in patient diagnostics.

Prerequisite(s): VET1206 and VET1208  
Corerequisite(s):none

### **VET1414 Large Animal Medicine**

Livestock and herd health, including preventative medicine and common medical conditions of horses, cattle, sheep, goats, swine and poultry are examined. Environmental conditions, reproduction, feeding, general nursing care, diagnostic procedures, and how these factors relate to health and disease is studied. Students become familiar with regulatory veterinary medicine and how it applies to large animals and zoonosis.

Prerequisite(s): VET1208  
Corerequisite(s):none

### **VET1419 Emergency Medicine and Critical Care**

All veterinary technicians are faced with an emergency medical situation at some point in their career and their contribution can be significant in the treatment of the patient, and the compassionate care of its owner. Students explore emergent diseases and procedures in the small animal veterinary hospital. Topics studied include First Aid, emergency planning, triage, cardiopulmonary resuscitation, wound management, transfusion medicine, toxicities, neurological, ocular, cardiac, respiratory, abdominal, endocrine, urinary, reproductive and neonatal emergencies, as well as the specialized care of oncology patients.

Prerequisite(s): VET1309 and VET1311 and VET1316  
Corerequisite(s):none

**VET1421 Clinical Practices 4**

Introducing new skills and building on skills developed in previous semesters, students perform in the on-campus veterinary clinic with greater independence and confidence in small animal anesthesia, surgical assisting, dental prophylaxis, radiography, sample collection and analysis, patient assessment and medication administration. Rodent and avian handling and medication administration is introduced and performed. Students will attend large animal rotations at partnering farms, having the opportunity to complete a variety of medical skills with cows, horses and other livestock species. With the support of community partners, students rotate through on and off-site veterinary facilities in the early morning, evening, weekends and holidays.

Prerequisite(s): VET1309 and VET1310 and VET1311 and VET1315 and VET1316 and VET1317  
Corerequisite(s):none

**VET1423 Veterinary Practicum**

Following the successful completion of all other Veterinary Technician program credits, students' educational experiences are consolidated within a college approved veterinary medical facility over four weeks. Students are mentored by credentialed veterinary medical professionals and are given the opportunity to further develop their knowledge and skills, all while making lasting professional connections within the veterinary community. The chosen medical facility determines the working hours for the student, which can include days, evenings, overnights, weekends and holidays. Students are required to apply and compete for the position. The college requires the student to submit a cover letter and resume for consideration and be chosen as the successful candidate after an interview with the medical facility before proceeding with the practicum. A clear police criminal record check is to be submitted to Paramed Pass at least 1 month before beginning the veterinary practicum.

Prerequisite(s): VET1401 and VET1414 and VET1419 and VET1421 and VET1424  
Corerequisite(s):none

**VET1424 Veterinary Practice Management**

Practice and team management is an opportunity which can bring about great career satisfaction for a veterinary technician. Students examine the principles of managing a veterinary medical facility. Areas of study include human resources management, client care, accounting and financial considerations, inventory management, business marketing principles and the legal and ethical aspects of operating a veterinary practice.

Prerequisite(s): ENL5501  
Corerequisite(s):none