

## PROGRAM INFORMATION

<b>Academic Year:</b>	2026-2027
<b>Credential:</b>	Ontario College Diploma
<b>Program Delivery:</b>	Full-Time
<b>Duration:</b>	2 Years
<b>Length:</b>	4 Semesters
<b>Program Code(s):</b>	H058 - Haileybury Campus (HL)

## DESCRIPTION

This two-year diploma combines intensive coursework in animal sciences with hands-on clinical training in various environments. Students learn fundamental veterinary technology skills such as animal care and behavior, anatomy and physiology, pharmacology, animal nutrition, and diagnostic imaging. The curriculum also emphasizes ethics and communication to prepare students for the challenges of veterinary practice with professionalism and empathy. Experienced professionals lead classes, sharing practical insights to help students prepare effectively for their future careers.

Practical skills are a cornerstone of the program, with extensive lab sessions and externships allowing students to apply their knowledge in real-world scenarios. They gain proficiency in essential techniques like physical examinations, administering medications, venipuncture, anesthesia, patient monitoring, and assisting in surgeries.

Upon completion of the program, graduates are ready to take the Veterinary Technician National Examination (VTNE) and pursue registration from the OAVT to become a Registered Veterinary Technician, opening the door to a rewarding career in various settings, including private practices, research institutions, and zoos. Learn more about what an RVT is and what RVTs do from the Ontario Association of Veterinary Technician's website at <https://oavt.org/about/what-is-an-rvt/>.

## CAREER OPPORTUNITIES

Graduates may find employment as veterinary technicians working in veterinary practices, humane societies, public or private zoos, research facilities, telemedicine or with federal and provincial governments. They may also work as sales representatives for veterinary companies.

## VOCATIONAL LEARNING OUTCOMES

1. Participate in facility management utilizing traditional and electronic media and appropriate veterinary medical terminology and abbreviations.
2. Communicate effectively and accurately in a professional manner in all formats - written, oral, non-verbal and electronic.
3. Follow and uphold applicable laws and the OAVT's code of ethics to maintain high ethical standards so that high quality care is provided to patients, clients, employers and the veterinary profession.
4. Safely and effectively administer and dispense prescribed drugs to patients.
5. Demonstrate and perform patient assessment techniques with minimum stress and maximum safety in a variety of animal species so that objective and subjective data is accurately obtained.

6. Demonstrate and perform husbandry, nutrition, therapeutic and dentistry techniques appropriate to various animal species as directed but the veterinarian in order to enhance wellness and achieve maximum health benefits for the patient.
7. Safely and effectively select, utilize and maintain anesthetic delivery and monitoring instruments and equipment to provide maximum benefit and safety to the patient and staff.
8. Safely and effectively manage and maintain patients in all phases of anesthesia providing for adequate anesthesia, analgesia and safe recovery.
9. Understand and integrate all aspects of patient management for common surgical procedures in a variety of animal species (ovariohysterectomy in dogs and cats, and orchiectomies in the dog, cat and other common species).
10. Provide the appropriate instruments, supplies and environment to maintain asepsis during surgical procedures to ensure maximum safety and benefit to the patient.
11. Demonstrate knowledge of proper handling, packaging and storage of specimens for laboratory analysis to ensure safety of patients, clients, and staff.
12. Safely and effectively produce diagnostic radiographic and non-radiographic images using non manual restraint where possible to ensure maximum diagnostic benefit and minimize personnel radiation exposure.
13. Safely and effectively handle common laboratory animals used in animal research.
14. Describe provision of safe and effective care for birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets.

## PROGRAM COURSES

The following reflects the planned course sequence for full-time offerings of the program. Programs at Northern College are delivered using a variety of instruction modes. Courses may be offered in the classroom or lab, entirely online, or in a hybrid mode which combines classroom sessions with virtual learning activities.

<b>Semester 1</b>		<b>Hours</b>
GN1083	Managing for Success	42
VA1043	Client Relations	42
VT1002	Clinical Calculations I	28
VT1005	Laboratory Procedures and Techniques	70
VT1011	Kennel Duty I	14
VT1013	Clinical Studies I	42
VT1022	Applied Animal Behaviour	28
VT1034	Animal Anatomy and Physiology I	56
VT1041	Necropsy Lab 1	14
VT2032	Clinical Exercises I	28
<b>Semester 2</b>		
GN1443	Indigenous Culture and Awareness	42
VT1012	Animal Nutrition and Digestion	28
VT2002	Clinical Calculations II	28
VT2005	Laboratory Procedures and Techniques II	70
VT2011	Kennel Duty II	14
VT2033	Clinical Studies II	42

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VT2034	Animal Anatomy and Physiology II	56
VT2051	Field Placement I	80
VT2052	Clinical Exercises II	28
VT2062	Necropsy Lab II	14
VT2083	Radiology I	42
VT4093	Dentistry I	42

### Semester 3

EL1031	General Education Elective	42
GN1011	Employment Preparation	14
VT1001	Registered Veterinary Technician Prep I	14
VT2042	Management Technology	28
VT3005	Laboratory Procedures and Techniques III	70
VT3022	Laboratory Animal	28
VT3031	Kennel Duty III	14
VT3032	Clinical Exercises III	28
VT3053	Surgical Exercises I	42
VT3063	Pharmaceutical Principles I	42
VT3083	Radiology II	42
VT3093	Clinical Studies III	42
VT3133	Veterinary Technician Surgery	42
VT4075	Large Animal Medicine	70

### Semester 4

VT4000	Field Placement II	160
VT4005	Laboratory Procedures and Techniques IV	55
VT4011	Kennel Duty IV	11
VT4021	Registered Veterinary Technician Prep II	11
VT4033	Surgical Exercises II	33
VT4042	Clinical Exercises IV	22
VT4063	Pharmaceutical Principles II	33
VT4113	Radiology III	33
VT4123	Dentistry II	33
VT4143	Clinical Studies IV	33
VT4153	Wildlife and Exotics	33

## PROGRAM PROGRESSION

The following reflects the planned progression for full-time offerings of the program.

### Fall Intake

- Sem 1: Fall 2026
- Sem 2: Winter 2027
- Sem 3: Fall 2027
- Sem 4: Winter 2028

## ADMISSION REQUIREMENTS

- Ontario Secondary School Diploma (OSSD)
- Grade 12 English (C, U)
- Grade 12 Math (C, U)
- Grade 12 Chemistry (C, U) (will accept Grade 11 “U” Chemistry in place of Grade 12 “C” Chemistry)
- Grade 11 Biology (C, U)
- Minimum 60% GPA required in all pre-requisite courses
- Or equivalent

Graduates from a Veterinary Assistant or Animal Grooming program, in addition to the usual requirements for direct entry from high school – require a minimum GPA of 3.0 upon graduation.

Academic prerequisites for this program may be obtained free of charge through [Academic Upgrading](#).

Applicants who do not have a high school diploma or equivalent and will have reached the age of 19 years on or before the start of the program must undergo academic testing and may be required to complete [Prior Learning Assessment & Recognition \(PLAR\)](#) process to demonstrate equivalency of admission requirements prior to admission into a program.

For more details, please contact the Admissions Office at 705-235-7222 or [admissions@northern.on.ca](mailto:admissions@northern.on.ca).

## Additional Requirements for International Students

In addition to the admission requirements, international students must have proof of [English Proficiency](#) and meet the requirements below.

1. Proof of Senior High School Diploma/Certificate
2. English Proficiency (we will require one of the following):
  - IELTS Academic International English Language Testing System: a minimum overall score of 6.0 must be achieved with no individual band score under 5.5
  - TOEFL (Test of English as a Foreign Language) – Computer-based overall minimum score of 79
  - PTE (Pearson Test of English) Academic – Graduate Diploma: 58+
  - Duolingo: 105+
3. CO-OP Work Permit is mandatory for this program to participate in unpaid program placements.

If your country of citizenship has English as its official language, we may accept alternate proof of English Proficiency. All educational documents must be submitted in English and will be dependent on the country of citizenship. For more information, please contact [admissions@northern.on.ca](mailto:admissions@northern.on.ca).

## PROGRAM SPECIFIC REQUIREMENTS & ADDITIONAL INFORMATION

Refer to the program page for [Veterinary Technician Program Requirements](#) documentation.

- Proficiency in word processing recommended

- Rabies vaccine series or titre prior to start of program (at student's expense). The rabies vaccinations/titre should be started in May or June, and proof is due by August 1.
- Some experience in a veterinary clinic or hospital is considered an asset

This program is both physically and mentally demanding, requiring students to work on their feet for extended periods, lift and restrain animals, manage emotionally challenging situations, and maintain focus in a fast-paced clinical environment.

The Veterinary Technician program is a rewarding but demanding path—designed for those who are committed to animal health and ready to work hard. Before applying, consider the following qualities and expectations that can set you up for success:

- **Time Commitment:** Be prepared to dedicate 20–25 hours per week outside of class for studying, assignments, and skill development. There's a lot to learn, and consistent effort is key.
- **Academic Readiness:** Strong skills in math, science, and English are important. Students without university-level or senior-level courses in these areas may find the program more challenging.
- **Time Management & Accountability:** You'll need to manage a busy schedule, take initiative, and complete tasks efficiently—often under pressure.
- **Teamwork & Leadership:** Veterinary care is collaborative. You should be able to work well with others, follow direction, and step into leadership roles when needed.
- **Animal Care Skills:** Success in this field requires compassion, attention to detail, and a strong commitment to providing high-quality care to animals.
- **Communication Skills:** You'll interact with clients, coworkers, and other professionals—so clear, respectful communication and strong interpersonal skills are essential.
- **Physical Demands:** Expect to lift and carry up to 25 kg, stand for long periods, and work in physically active environments.
- **Clinical Comfort Level:** You should feel comfortable in medical settings that involve assisting with invasive procedures, handling lab specimens, and working with animal bodily fluids.
- **Prior Experience (Recommended):** While not required, experience in a veterinary clinic or animal care setting can help you understand the demands of the profession and determine whether this program—or another option like our Veterinary Assistant or Animal Grooming program—is the right fit for your goals.

Please apply by February 1<sup>st</sup> for your best chance of obtaining a seat in the program.

Our Veterinary Technician graduates are given priority for admission into our third-year programs, which include [Wildlife Rehabilitation](#) and [Companion Animal Physical Rehabilitation](#).

## Work Integrated Learning Opportunities

During the program's two years, students will have the opportunity to visit cattle and horse farms and care for companion animals, including lab animals such as rats and rabbits.

At the culmination of year one, students are placed in clinical environments for an immersive experience within a veterinary clinic setting. Students assist with routine examinations, observe surgical procedures, and interact with clients while gaining valuable hands-on experience in animal care and medical procedures. As students

complete their second year of the diploma program, they embark on a more advanced field placement designed to deepen their clinical competencies and expand their scope of practice. This field placement challenges students to apply critical thinking skills, highlight their knowledge of new technologies, and demonstrate professionalism and teamwork. By the end of this placement, students will have emerged with a heightened level of confidence, proficiency, and readiness to excel as veterinary technicians.

## Articulation / Transfer Agreements

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a regular basis. Please contact the program coordinator for specific details if you are interested in pursuing such an option. Additional information can be found at [Articulation Agreements](#).

## Accreditation

The Veterinary Science Centre and our [Veterinary Technician](#) program are accredited by:



CANADIAN VETERINARY  
MEDICAL ASSOCIATION  
L'ASSOCIATION CANADIENNE  
DES MÉDECINS VÉTÉRINAIRES



ONTARIO  
ASSOCIATION OF  
VETERINARY  
TECHNICIANS



GAP – Good Animal Practice®  
Bonnes pratiques animales – BPA®

## GRADUATION REQUIREMENTS

- 44 Program Courses
- 3 General Education Courses

## Graduation Eligibility

To graduate from this program, a student must attain a minimum of 60% or a letter grade of CR (Credit) in each course in each semester unless otherwise stated on the course outline. Students should consult departmental policies and manuals for additional details and exceptions.

## Graduation Window

Students unable to adhere to the program duration of two years (as stated above) may take a maximum of four years to complete their credential. After this time, students must be re-admitted into the program and follow the curriculum in place at the time of re-admission.

## CONTACT INFORMATION

For questions about being admitted into the program, please contact Northern College Admissions at [admissions@northern.on.ca](mailto:admissions@northern.on.ca) or by phone at 705-235-3211 ext. 7222. For questions about the content of the program, contact the Program Coordinator.



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## **COURSE DESCRIPTIONS**

### **Semester 1**

#### **GN1083 Managing for Success**

The course is designed to help students gain insights and skills to promote personal and professional development. Students will develop an understanding of how they manage their lives and incorporate skills to maximize their strengths and reduce the impact of less effective techniques. Students will learn about resources that are available to them and the intelligence of accessing additional support when needed. The content of this course provides students with the opportunity to lay a foundation for lifelong learning; learn to communicate effectively, build and value productive and satisfying diverse relationships and prepare for the challenges and rewards that make life meaningful.

#### **VA1043 Client Relations**

This one semester course is designed for the Animal Groomer, Veterinary Assistant and the Veterinary Technician and their role in the daily operation of a veterinary practice. The course will include sections on oral, written and electronic communication, team work and group practice and customer service. There will also be components on the human animal bond, grief support, compassion fatigue and ethics in the veterinary practice. This course will enable the students to practice the skills required for effective work in client relations.

#### **VT1002 Clinical Calculations I**

These first calculations course focuses on mathematical principles, dimensional analysis including unit conversions and the fundamentals of solutions and concentrations. Applications from nursing and the veterinary sciences are explored to show where and how mathematical techniques are required in a lab setting.

#### **VT1005 Laboratory Procedures and Techniques**

This course is an introduction to laboratory procedures and practice. Students will become familiar with tests commonly and most frequently used in the veterinary laboratory. Students will acquire the proper techniques to perform tests and learn the significance of test results. An understanding of what is considered normal or abnormal will become clear. A large segment of time will be used to become familiar with quality control and the significance of its use. Hematology, sterilization, disinfection and aseptic techniques will be of special focus.

#### **VT1011 Kennel Duty I**

This course will prepare the student to function in a veterinary environment. Students will provide care for the colony animals housed at Northern College. The use of Standard Operating Procedures will assist the student. The Veterinary Science facility simulates the professional environment and enables the students to learn the skills necessary to function as a productive team member.

14 Hours

**VT1013 Clinical Studies I**

This course is an introduction to the responsibilities of a veterinary technician working in a clinic. It begins by emphasizing safety for both the animal and handler in applying appropriate physical restraint. Students are alerted to other common hazards of the profession, such as those found in anesthesia, radiology and zoonosis. Further areas of study include: taking the history, conducting a physical examination, keeping medical records, animal identification, skin and coat care, vaccination and parasite control. In this course, students learn veterinary terminology so they can communicate with other members of the veterinary team and understand the literature of the profession. The course delineates the different roles for veterinarians, technicians and assistants on the veterinary team and discusses professional organizations that determine the scope of practice for each. Students are made aware of the continuing education opportunities open to graduate technicians.

**VT1022 Applied Animal Behaviour**

Animal care providers often encounter animals with behaviour problems. They must be able to interpret an animal's body language in order to safely handle them without inflicting additional distress. Additionally, technicians must have an understanding of the influences driving animals to behave as they do. Veterinary Technicians need to determine when it is appropriate to provide advice to a client, or when to refer the problem to the veterinarian or behavioral specialist. This course delves into accepted training techniques to prevent and modify common abnormal behaviors, including pharmaceutical means when necessary. It provides the student with the ability to determine the level of stress of the patient and respond accordingly.

**VT1034 Animal Anatomy and Physiology I**

This introductory course begins with the basic principles of living matter and evolves to consider the mammalian body and how it works. While the focus is on the domestic dog and cat, comparative differences between small animals, livestock and avian systems are covered. By the end of the course, the student has covered the following body systems - integumentary, skeletal, muscular, cardiovascular and respiratory.

**VT1041 Necropsy Lab 1**

This course is a practical lab that will allow the students to gain hands-on experience enhancing the knowledge that they have acquired in Anatomy and Physiology I. The students will learn why and how necropsies are performed and also have a chance to practice sample collection of specimens. The course will use multiple modalities such as cadavers, individual specimens and necropsy manikins (Syndavers).

**VT2032 Clinical Exercises I**

This course will give students the technical skills required to be successful in a veterinary clinic. Subjects include oral and parenteral administration of medications, various methods of sample collection, ophthalmic and optic treatments, and restraint.



**Semester 2****GN1443 Indigenous Culture and Awareness**

This general education course will provide students with an introduction to Canadian Indigenous Nations' history, sovereignty, land titles, cultural history and current critical issues. Topics addressed include the content of Indigenous rights, economic and social development, community and political processes, and business law and policies, justice & social services. Canadian Indigenous History and Relations is a general education course that has been incorporated into all programs at Northern College

**VT1012 Animal Nutrition and Digestion**

Topics covered include classes of nutrients, principles of nutrition and digestion, specialized digestive structures, roles of specific nutrients, dietary requirements and the evaluation of diets for different animal classes, nutrient deficiencies, determining relative economic value of feed products, therapeutic diets, and the effect of the environment of nutrient requirements.

**VT2002 Clinical Calculations II**

This is the second calculations course focusing on drug dosage calculations. The learner will perform calculations to reconstitute drugs, determine dosages based on body weight and body surface area and in the administration of intravenous drugs. Applications from nursing and the veterinary sciences are explored to show where and how mathematical techniques are required in a lab setting.

**VT2005 Laboratory Procedures and Techniques II**

This course is a continuation of Laboratory Procedures and Techniques I. Students will study clinical chemistry, urinalysis, and cytology while practicing the techniques taught in the first semester. Special care will be placed on understanding the consequence of failure to report accurate results. Confidence limits will be stressed. The final exam for this semester will include material from the first and second semesters.

**VT2011 Kennel Duty II**

This course will prepare the student to function in a veterinary environment. Students will provide care for the animals owned by Northern College. The use of Standard Operating Procedures will assist the student. The Veterinary Science facility simulates the professional environment and enables the students to learn the skills necessary to function as a productive team member.

**VT2033 Clinical Studies II**

Clinical Studies II is a continuation from the introduction to Veterinary Technology that began with Clinical Studies I. It covers the topics of canine and feline anesthesia and analgesia. The art and practice of anesthesia consists of understanding the terms commonly used in anesthesia, learning about anesthetic and monitoring equipment and any necessary equipment maintenance. Students need to understand the pharmacology of anesthetic and analgesic drugs and their antagonists, as well as how to monitor these agents. They will learn how anesthetic agents are best administered and understand the appropriate responses to anesthetic related complications and emergencies. These subjects prepare students for work they will encounter in their placement and in their future profession.

**VT2034 Anatomy and Physiology II**

Anatomy and Physiology II is a continuation of Anatomy and Physiology I. Together these courses are designed to give veterinary technician students a fundamental understanding of the parts of the body and how they are assembled into body systems that are interconnected with each other. Whereas Anatomy and

Physiology I focuses on tissues, integument, skeletal, muscular, cardiovascular, and respiratory systems, Anatomy and Physiology II completes the study of the body by examining the nervous, sensory, endocrine, urinary, reproductive, digestive and lymphatic systems.

**VT2051 Field Placement I**

The field placement course provides a valuable opportunity for students to experience veterinary practice firsthand. The field placement also permits students to demonstrate and practice their theoretical knowledge, values and skills taught in the classroom and to be evaluated on those competencies. This field placement course provides an opportunity for students to apply and consolidate their education from the first and second semesters of their program of study.

**VT2052 Clinical Exercises II**

In this competency-based course, students build upon previously acquired skills and increase their efficiency and understanding. While functioning as part of a group, students participate in physical examinations, intramuscular, subcutaneous and intravenous injection techniques, restraint of small animal patients, surgical preparations, anal gland expression, and taking blood. Students are marked on skill and willingness to participate.

**VT2062 Necropsy Lab II**

This course is a practical lab that will allow the students to gain hands on experience enhancing the knowledge that they have acquired in Anatomy and Physiology II. The students will learn why and how necropsies are performed and also have a chance to practice sample collection of specimens. The course will use multiple modalities such as cadavers, individual specimens and necropsy manikens (SynDavers).

**VT2083 Radiology I**

This course will introduce the student to imaging techniques, concentrating on radiology with some basics of ultrasonography, computed tomography and nuclear scintigraphy. The physics of radiology, the safe and efficient preparation, exposure and processing of radiographs will be discussed in great detail. The student will also learn technical evaluation and correction of radiographs.

**VT4093 Dentistry I**

This course is intended to be comprehensive, bringing students from relatively little knowledge in veterinary dentistry to a practical working knowledge. The course will include sections on oral examination and disease recognition, dental instruments and equipment, anesthesia and pathogens.

**Semester 3****EL1031 General Education Elective**

General Education Courses are selected online each semester by the student from a list provided and exposes students to a related area of study outside of their immediate academic discipline. Certain programs have predetermined electives.

**GN1011 Employment Preparation**

This course will enable the students to become familiar with specific employment requirements for their field of interest. The students will also have the opportunity to learn how to self-market for job finding, as well as how to maximize their potential for success in an interview situation. This course is designed to assist students in

obtaining employment. Students will also learn to prepare themselves for varied Fieldwork Placements. This semester will concentrate on incorporating skills from the Client Relations Course to further develop their interpersonal communication skills through their ability to prepare for an employment interview. The course will also discuss work ethics and the role they play in long-term employ ability.

**VT1001 Registered Veterinary Technician Prep I**

This course consists of weekly study sessions to help graduating students prepare to challenge their professional registry examination, the Veterinary Technician National Examination (VTNE). The content reflects the practice domains covered by the VTNE, currently set up as follows: Domain 2. Surgical Prep & Assisting; Domain 3. Dentistry Procedures; Domain 5. Animal Care and Nursing; Domain 6. Radiography, Ultrasound; Domain 7. Anesthesia. It is recognized that acquisition of medical vocabulary is essential in answering many VTNE questions, as is proficiency in basic mathematical calculations. Students will review strategies considered helpful in taking multiple choice tests. Examples of typical RVT questions will be covered in this class. Questions the instructor considers "essential RVT knowledge" will be highlighted. It should be noted that the instructor never sees the actual paper RVT candidates write, but is presenting an "educated guess" on material likely to be on the exam. The Angoff method of scoring which the VTNE uses is explained.

**VT2042 Management Technology**

This course will give the student practical skills on specialized veterinary software packages such as Pulse (a "cloud-based" software-as-a-service solution you can access from anywhere via a web browser), and AVImark (a popular software used in veterinary office clinics which is installed on our on-campus computer lab workstations). Students will learn to set up files for new clients and/or new patients, bill clients for services and products, print appropriate certificates and prescription labels, as well as practice accepting payments.

**VT3005 Laboratory Procedures and Techniques III**

This course is a continuation of Laboratory Procedures and Techniques I and II. A review of health and safety standards will help to ensure students' well-being and safety. Parasitology, virology and immunology will be stressed. Abnormal hematology and chemistry cases will be reviewed to provide continuing development of laboratory expertise. The final exam for this semester will cover material from the first two semesters as well as the third semester.

**VT3022 Laboratory Animal**

This course provides students with a comprehensive introduction to the care and management of laboratory animals in a research setting. Emphasis is placed on the ethical principles, guidelines, and standards of care that ensure animal welfare and support responsible research practices. Students will explore the health, behaviour, and species-specific needs of common laboratory animals, including rabbits, rats, mice, hamsters, gerbils, and guinea pigs. Instruction will cover proper handling and restraint techniques, nursing care, preventive health measures, and husbandry practices such as housing, nutrition, sanitation, and environmental enrichment. Through this course, students will gain the knowledge and skills necessary to recognize normal and abnormal conditions, apply best practices in animal care, and contribute to the humane and ethical treatment of laboratory animals in a professional research environment.

**VT3031 Kennel Duty III**

This course is a continuation of Kennel Duty I and II. The student will be responsible for the administration of medications, care and, where required, bandaging of the kennel animals.

**VT3032 Clinical Exercises III**

In this course the student will repeatedly practice the skills learned in Clinical Exercises I and Clinical Exercises II, while learning new skills that will be necessary to perform the tasks of a Veterinary Technician. These new skills include bandaging techniques, recognizing several dermatology problems and performing dermatological diagnostics, performing enemas, collecting urine samples, and suturing. Whenever possible, students will develop competency of new skills on models before attempting procedures on live animals.

**VT3053 Surgical Exercises I**

This course is a practical training session for veterinary technicians to become familiar with anesthesia, surgical supplies/equipment, and surgical procedures. There is a heavy emphasis on hands-on experience. The class is divided into small groups for better supervision and learning. The initial laboratories will familiarize the students with anesthetic drugs, dosage calculations, anesthetic equipment setup and care, patient monitoring, and gowning /gloving to assist in surgery. In the final rotations, each group is responsible for taking a patient from the pre-operative examination and laboratory evaluation through to patient recovery and post-operative care. These live surgeries will combine practical experience with knowledge learned in previous surgical labs and other theory classes.

**VT3063 Pharmaceutical Principles I**

This is the first of two courses which together provide a comprehensive review of important groups of drugs used in veterinary medicine. The course begins with general aspects of pharmacology, such as the sources of drugs, their modes of action, dosage forms and pharmacokinetics, but progresses to discuss in detail those drugs which are used to correct disorders in specific body systems. In this first course, drugs affecting the gastrointestinal, cardiovascular and respiratory systems are covered. In addition, the student is required to calculate doses accurately and understand the components of a prescription. The student is introduced to specific legislation affecting the storage and dispensing of pharmaceuticals. Through this knowledge, the technician is able to help a veterinary practice meet its legal responsibilities.

**VT3083 Radiology II**

This course offers students the opportunity to put into practice the knowledge obtained in Radiology I. Students will be placed in small groups and expected to take x-rays using all safety techniques and guidelines as demonstrated by the professor. Students will be evaluated on their professionalism and the quality of the x-rays produced.

**VT3093 Clinical Studies III**

Clinical Studies III is a continuation of the Veterinary Technology series that began with Clinical Studies I and II. It discusses the topics of Surgical Nursing, Wound Care and Bandaging. These subjects will prepare the students for the work they will carry out in their placements and in their future profession. The Veterinary Technician may need to assist the Veterinarian with many aspects of surgery. The principles learned in Clinical Studies III will be applied practically in Surgical Exercises I and II.

**VT3133 Veterinary Technician Surgery**

This course is designed to provide practical training for students to become familiar with surgical procedures and to practice dental prophylaxis and anaesthetics learned in lectures. Students will carry out procedures at a veterinary clinic for one 3-hour period once every third week during the semester. The sessions are set up to mirror the normal procedures the veterinary technician student will encounter after graduation. The surgical

procedures performed by the students are in keeping with the Canadian Veterinary Medical Association guidelines.

**VT4075 Large Animal Medicine**

This course will deal with the general needs of large animal veterinary practice. The veterinary technician will develop an appreciation for livestock medical and surgical techniques, and commonly encountered conditions. The student will acquire general understanding of clinical procedures, bandaging, reproduction, housing, bio-security, behavior, animal handling and restraint. Proper sample collection and animal identification for official certificates will be reviewed. The student will also become familiar with the general clinical examination of equine and ruminant species. During the laboratory sessions, students will be given the opportunity to apply many of the techniques covered during lecture.

**Semester 4****VT4000 Field Placement II**

Students will be expected to spend a minimum of four weeks (160hrs) at the clinic where they have arranged placement. The clinic must be able to provide the necessary work experiences. It is expected that students will perform the duties regularly expected of a new graduate with the same experience level. This will give students the opportunity to experience clinic life and practice their newly gained knowledge and skills. Students are required to review and follow the Placement Manual, which outlines all policies, procedures, expectations, and evaluation processes. The manual serves as a reference guide to support students in meeting professional standards and program requirements during placement.

**VT4005 Laboratory Procedures and Techniques IV**

This is the final course in the Laboratory Procedures and Techniques series. The disciplines of microbiology and mycology will be taught this semester. Additional time will be allocated to develop student's proficiency in all areas of lab techniques. The final exam in this semester will include material from all four semesters.

**VT4011 Kennel Duty IV**

This course will prepare the student to function in a veterinary environment. Students will provide care for the colony animals housed at Northern College. The use of Standard Operating Procedures will assist the student. The Veterinary Science facility simulates the professional environment and enables the students to learn the skills necessary to function as a productive team member.

**VT4021 Registered Veterinary Technician Prep II**

The course prepares students to challenge their national professional examination and become registered veterinary technicians.

**VT4033 Surgical Exercises II**

This course is a continuation of the practical training for veterinary technicians to become familiar with surgical procedures. Students practice their skills while participating in a surgical team. New procedures that were not previously covered in Surgical Exercises I are added. The class is divided into small working groups to allow an optimum supervisor to student ratio. Each team is responsible for taking a patient from pre-surgical examination and laboratory screening through to patient recovery and return to the owner. Routine veterinary procedures are practiced under anesthesia.

**VT4042 Clinical Exercises IV**

In this competency-based course, the student builds upon previously acquired skills and increases efficiency and understanding. This course aims to bring together all the information they have learned over the past three semesters and apply it to a clinical setting. Students will work independently or in a group and in a professional manner. The student will spend some time doing independent research and the remainder of the class practicing skills.

**VT4063 Pharmaceutical Principles II**

This course is a continuation of Pharmaceutical Principles I. Together these courses are designed to give veterinary technician students a fundamental understanding of general aspects of pharmacology, while covering in more detail specific classes of drugs that are important in veterinary medicine such as microbials, anesthetics and antiparasitics.

**VT4113 Radiology III**

This course is a continuation of Radiology II. Each student will be assigned to a small group, and this group will be expected to carry out the x-ray techniques as requested. Students will be marked on the quality of the x-ray film as well as their professional conduct.

**VT4123 Dentistry II**

This course gives the student the opportunity to practice the skills needed to perform dental prophylaxis. The knowledge gained in Dentistry I will be put into practice. Students will be marked on their basic knowledge of instruments, techniques and their willingness to attempt the skills demonstrated by the professor. In addition they will get an introduction to the use of an ultrasound as a diagnostic tool in relation to the technique as well as what images are to be anticipated.

**VT4143 Clinical Studies IV**

Clinical Studies IV is a continuation of the veterinary technician clinical studies series, whose courses prepare students for work they will see in their future profession. This course emphasizes aspects of emergency care, primarily for dogs and cats, where technicians can be useful in assisting the veterinarian in the diagnosis and therapeutic approach to the critically ill patient from basic and advanced life support to intensive nursing care. The course deals with nursing procedures, such as fluid therapy, blood transfusions, oxygen therapy, nutritional support of hospitalized patients, dystocia, trauma, ocular, urogenital, gastrointestinal and neurologic emergencies. There is a brief overview of advanced imaging technologies, such as computerized tomography, magnetic resonance imaging, ultrasound and endoscopy. Large animal field radiology and relevant safety measures are discussed.

**VT4153 Wildlife and Exotics**

This course is designed to introduce students to the world of wildlife rehabilitation and exotic animal care. Students will experience some hands-on care to compliment classroom theory.