

PROGRAM INFORMATION

Academic Year	2024 – 2025
Credential	Graduate Certificate
Program Delivery	Full - Time
Duration	1 Year
Length	2 Semesters
Program Code	H151 (HL) – Haileybury Campus

DESCRIPTION

Physical rehabilitation is becoming part of everyday veterinary medicine. Northern College's Companion Animal Physical Rehabilitation program is designed for individuals passionate about improving the well-being of animals. The program combines in-depth theoretical knowledge with hands-on experience to prepare students for rewarding careers in private rehabilitation clinics, veterinary clinics, and fitness/conditioning centers.

Our curriculum is taught by experts in the field and carefully crafted to provide students with a solid foundation in advanced anatomy and physiology, therapeutic techniques, and neurologic and orthopaedic conditions. Students work directly with animals, including clinical cases, applying their knowledge and skills in real-world settings.

With its strong focus on specialized patient care, this one-year graduate certificate will add to your knowledge and skill set, extending the range of services offered to a patient. This certificate will increase your valuable contribution to any companion-animal care team.

Please note: This program is a graduate certificate available to graduates of an accredited Veterinary Technician two-year diploma program. If applying directly from high school, please choose our Veterinary Technician program, program H058. Upon graduation from a Veterinary Technician program, you will qualify to apply for our Companion Animal Physical Rehabilitation program.

The OAVT accredits this program for 20 continuing education credits in Category 1 (Medical/scientific).

CAREER OPPORTUNITIES

Graduates are able to establish their own physical rehabilitation business working with referring veterinarians, veterinary practices with rehabilitation services, private rehabilitation facilities, and organizations with conditioning/fitness programs.

VOCATIONAL LEARNING OUTCOMES

1. Perform patient examination and collect data on vital signs on patients needing physical rehabilitation.
2. Restrain and manage small animal patients in clinical situations where physical rehabilitation is required.

3. Administer medications by common drug routes and prepare pharmaceuticals as prescribed by the veterinarian for patients undergoing physical rehabilitation therapy.
4. Produce standard diagnostic radiographs on patients requiring physical rehabilitation.
5. Collect and process samples of diagnostic laboratory work on patients requiring physical rehabilitation.
6. Perform common veterinary diagnostic tests, such as blood chemistries, differentials, culture and sensitivities, and ECGs on patients requiring physical rehabilitation.
7. Perform basic veterinary practice management including computer applications.
8. Using techniques such as "pain scoring", recognize and evaluate painful conditions from which the veterinarian may prescribe physical rehabilitation therapy.
9. Counsel clients, especially in the area of pet nutrition, for patients requiring physical rehabilitation.
10. Perform functions to enable the patient's optimal physical function by contributing to the development, implementation, and modification of intervention/treatment plans, under the supervision of and in collaboration with the veterinarian.
11. Perform effectively within the roles and responsibilities of the physical rehabilitation technician through the application of relevant knowledge of veterinary sciences, and animal health conditions.
12. Practice competently in a legal, ethical, and professional manner within the role of the companion animal physical rehabilitation technician.

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.

Semester 1		Hours
RE1002	Introduction to Animal Physical Rehabilitation	28
RE1011	CAPR Kennel Duty	14
RE1012	Pathophysiology of Pain and Analgesics	28
RE1014	Therapeutic Techniques	56
RE1015	Advanced Anatomy	70
RE1022	Companion Animal Massage Theory	28
RE1024	Canine Assessment	56
RE2004	Electrotherapeutic Modalities	42
 Semester 2		
BU2213	Small Business Management	42
GN1443	Indigenous Culture and Awareness	42
RE2001	CAPR Kennel Duty II	14
RE2006	Clinical Cases	84
RE2013	Aquatherapy	42
RE2015	Advanced Physiology	70
RE2022	Companion Animal Massage Practical	28
RE2023	Neurologic and Orthopaedic Conditions	42

PROGRAM PROGRESSION

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

Fall Intake

- Sem 1: Fall 2024
- Sem 2: Winter 2025

WORK INTEGRATED LEARNING OPPORTUNITIES

N/A

ARTICULATION/TRANSFER AGREEMENTS

The OAVT accredits this program for 20 continuing education credits in Category 1 (Medical/scientific).

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](#).

ADDITIONAL INFORMATION

Our Veterinary Technician program is accredited by:



PROGRAM SPECIFIC REQUIREMENTS

[Companion Animal Physical Rehabilitation Requirements](#)

ADMISSION REQUIREMENTS

- Graduate of a Veterinary Technician program.
- Proof of rabies vaccination, showing a current protective titre.
- Some experience in a veterinary clinic or hospital is considered an asset.

GRADUATION REQUIREMENTS

- 15 Program Courses
- 1 General Education Course

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 one year (as stated above) may take a maximum of two 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 or by phone at 705-235-3211 ext. 7222. For questions about the content of the program, contact the Program Assistant.

Kellie Broderick
Program Assistant, School of Veterinary Sciences
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COURSE DESCRIPTIONS

Semester 1

RE1002 Introduction to Animal Physical Rehabilitation

This course covers legalities, goals, benefits and applications to common orthopaedic and neurological conditions.

RE1011 CAPR Kennel Duty

The Kennel Duty courses at Northern College are a vital part of preparing students to provide excellent animal care. You will acquire these competencies through practice while developing the responsibility and confidence to work safely and knowledgeably as part of a professional animal care team in our simulated veterinary clinic environment. During your kennel duty shifts, you will care for the colony animals housed at Northern College, following guidance in our Standard Operating Procedures.

RE1012 Pathophysiology of Pain and Analgesics

The pathophysiology of pain is covered in depth in this course. Pain sensation, transduction, transmission and perception are discussed, together with ways by which pain pathways can be interrupted. The complementary role of analgesics in contributing to successful companion animal rehabilitation is explored. Students learn about the benefits and risks of specific analgesics that a veterinarian may prescribe to companion animals.

RE1014 Therapeutic Techniques

This course reviews the various modalities available for canine physical rehabilitation. These include techniques such as stretching, strengthening and proprioception exercises, application of heat and cold packs, analgesics and massage. These techniques will be applied in a laboratory setting to selected cases.

RE1015 Advanced Anatomy

Focusing on canine anatomy, directional terminology, anatomic planes, bones, muscles, joints, ligaments and tendons, this course will be, an in-depth study requiring students to name and explain the function of the components of the skeletal system, including joints, ligaments and tendons, muscle origins and insertions, muscle function and muscle innervation and blood supply. Lectures will be accompanied by a laboratory component requiring the anatomically correct construction of a Canican model using plasticine to construct muscles, ligaments and tendons. The models will be accurately labeled for all the major skeletal and muscle structures.

RE1022 Companion Animal Massage Theory

This course covers the theory of companion animal massage. Upon the completion of this course, the student will have an understanding of the concepts of massage. The pathophysiology of common neurologic and orthopedic conditions is covered. Conditions that accompany ageing in canines are covered in detail. Common therapies that may be used in the rehabilitation of each condition will be discussed and students will design physical rehabilitation protocols and treatment schedules based on individual case details. Students will develop the ability to formulate treatment objectives and plans for specific conditions. The students will be expected to apply their knowledge and skills developed in previous companion animal anatomy and physiology, communication and behaviour courses.

RE1024 Canine Assessment

The student would learn how to conduct a neurological and orthopaedic examination on dogs in order to assess gait, posture and movement. Topics would include assessing range of motion and assigning a lameness score. Review of the importance of palpation in order to detect swellings and lumps will be emphasized. Videos or live demonstrations will be used to demonstrate normal and abnormal canine gaits.

RE2004 Electrotherapeutic Modalities

The student is introduced to the concepts and use of electric stimulation (E-stim), low level laser and ultrasound as applied to canine physiotherapy.

Semester 2

BU2213 Small Business Management

This course will introduce students to the fundamental approach to starting and managing a small business in Canada. An examination of what is necessary to start a small business will encompass strategic areas such as goal setting, organizational set-up, financial planning, accounting, marketing, human resources and legal issues.

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.

RE2001 CAPR Kennel Duty II

A continuation of the Fall semester. Students will provide care and therapeutic treatments to the colony animals under the direction of the colony veterinarian.

RE2006 Clinical Cases

In this course students will apply skills learned in previous courses to companion animal patients with orthopedic and neurological dysfunction. Assessments, design and implementation of rehabilitation protocols will be carried out in a collaborative environment.

RE2013 Aquatherapy

The student learns to apply the principles of aquatic therapy in its various delivery methods to develop protocols for individual cases based on patient assessment.

RE2015 Advanced Physiology

Focusing on muscle, cartilage, bone, the nervous system and lymphatics. This is an in-depth course requiring students to name origins and insertions of individual muscles and their function. Lectures would be accompanied by a laboratory component requiring identification of individual muscle groups on live animals, as well as dissection of fresh or preserved animal bodies.

RE2022 Companion Animal Massage Practical

The students will use theory that has been taught in Companion Animal Massage RE1022 to apply to their case studies. Massage techniques, friction techniques and using cryo/thermotherapy will be delivered to their patients. Students will be taught different massage routines and how and when to apply them to their patient. This course is hands on, and incorporates the importance of communicating with their patient, but also working in a group setting.

RE2023 Neurologic and Orthopaedic Conditions

The pathophysiology of common neurologic and orthopedic conditions is covered. Conditions that accompany ageing in canines are covered in detail. Common therapies that may be used in the rehabilitation of each condition will be discussed and students will design physical rehabilitation protocols and treatment schedules based on individual case details.