

Program Outline 2025-2026

#### PROGRAM INFORMATION

Academic Year: 2025-2026

**Credential**: Graduate Certificate

**Program Delivery**: Full-Time **Duration**: 1 Year

**Length**: 2 Semesters

**Program Code(s)**: H151 - Haileybury Campus (HL)

H153 - Distance

#### **DESCRIPTION**

Physical rehabilitation is becoming an integral part of modern veterinary medicine. Northern College's Companion Animal Physical Rehabilitation program is designed for individuals passionate about improving the well-being of animals.

Northern College's Companion Animal Physical Rehabilitation program 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 the treatment of neurologic and orthopedic conditions. Taught by industry experts, the program blends comprehensive theoretical instruction with practical, hands-on experience, including direct work with clinical cases

Graduates will be prepared for dynamic roles in veterinary clinics, private rehab practices, and animal fitness and conditioning centers. With its strong emphasis on specialized patient care, this one-year graduate certificate enhances your skill set and expands the services you can offer within a veterinary team.

This graduate certificate program is now available in a HyFlex model, offered both in person and at a distance. This flexible delivery ensures you can tailor your learning experience to suit your location and lifestyle.

## What's New with HyFlex

- Flexible Learning Options: Study in person or remotely with our new HyFlex format.
- On-Campus Practical: All students will attend a mandatory one-week, in-person practical and exam session at our campus in mid-December.
- Customizable Placement: Complete required placement hours on a flexible schedule.
- Adaptable Weekly Schedule: Includes weekly check-ins and a live session (attendance is encouraged but not required). All sessions are recorded, and alternative participation options are available.
- Flexible Yet Full-Time: The program follows a traditional September-to-April schedule, but accommodations are available to support your individual pace.
- Case-Based Learning: Case studies are integrated throughout to reinforce theoretical knowledge with real-world application.

#### CAREER OPPORTUNITIES

Graduates may choose to establish their own physical rehabilitation business, working in collaboration with referring veterinarians and other animal health professionals. Alternatively, they can pursue employment in veterinary clinics with rehabilitation services, private rehab facilities, or organizations focused on animal conditioning and fitness.



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## **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
RE1003	Companion Animal Rehab Practical I	40
RE1024	Canine Assessment	56
RE1032	Companion Animal Rebab Seminar I	28
RE1035	Advanced Animal Anatomy & Physiology	70
RE1045	Introduction to Modalities	70
RE1055	Applied Therapeutic Techniques	70
Semester 2		
RE1012	Pathophysiology of Pain and Analgesics	28
RE2011	Placement for Case Studies	200
RE2012	Companion Animal Rehab Seminar II	28
RE2023	Neurologic and Orthopaedic Conditions	42

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#### PROGRAM PROGRESSION

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

#### **Fall Intake**

Sem 1: Fall 2025 Sem 2: Winter 2026

## ADMISSION REQUIREMENTS

Graduate of a Veterinary Technician/Technology program.

This graduate certificate program is open to individuals who have completed a Veterinary Technician or Technology diploma. Those who have not yet completed a Veterinary Technician program, are encouraged to first apply to our Veterinary Technician program (Program H058). Upon graduation, they will be eligible to apply for the Companion Animal Physical Rehabilitation program.

#### PROGRAM SPECIFIC REQUIREMENTS & ADDITIONAL INFORMATION

- Companion Animal Physical Rehabilitation Requirements [PDF, 305 KB]
- Proof of rabies vaccination, showing a current protective titre.

## **Work Integrated Learning Opportunities**

Students in the Companion Animal Physical Rehabilitation program participate in a field placement, gaining hands-on experience in real-world settings such as veterinary clinics, rehab facilities, or wellness centres. These experiences, guided by industry professionals, help students apply their skills, build confidence, and make valuable professional connections.

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

The Veterinary Science Centre and our <u>Veterinary Technician</u> program are accredited by:











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#### GRADUATION REQUIREMENTS

15 Program Courses1 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 <a href="mailto:admissions@northern.on.ca">admissions@northern.on.ca</a> or by phone at 705-235-3211 ext. 7222. For questions about the content of the program, contact the Program Coordinator.

Kellie Broderick Program Assistant, School of Veterinary Sciences

Tel: 705-672-3376 ext. 8854

Email: vetsciences@northern.on.ca

## **COURSE DESCRIPTIONS**

#### Semester 1

## **RE1002 Introduction to Animal Physical Rehabilitation**

This foundational course provides an in-depth overview of the principles, goals, and applications of animal physical rehabilitation, with a focus on companion animals. Students will explore the history and scope of the field, the role of the Registered Veterinary Technician (RVT) in the rehabilitation team, and the legal and ethical considerations involved in practice. The course introduces common orthopedic and neurological conditions that benefit from rehabilitation.

## **RE1003 Companion Animal Rehab Practical I**

This intensive, hands-on module provides students with immersive practical experience in companion animal physical rehabilitation. Delivered over five days, students will participate in live patient assessments and treatments, integrating clinical skills and theoretical knowledge. Activities begin with an introduction to the college environment, a site tour, and foundational wet labs using therapeutic modalities on animals. Subsequent days focus on applied anatomy and physiology, patient assessment, and therapeutic technique implementation, with continued exposure to physical rehabilitation modalities.

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## **RE1024 Canine Assessment**

The student would learn how to conduct a neurological and orthopedic examination on dogs in order to assess gait, posture and movement. Topics would include assessing range of motion and assigning a lameness score. A 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.

## **RE1032 Companion Animal Rebab Seminar I**

Through weekly instructor-led meetings, the Companion Animal Rehabilitation Seminars engage in discussions and explore key questions within the program. The course will cover advances in the Companion Animal Rehabilitation industry, and sharing real-world case studies, fostering a collaborative learning environment. This seminar aims to equip students with comprehensive knowledge and practical skills essential for a successful career in animal rehabilitation.

## **RE1035 Advanced Animal Anatomy & Physiology**

Focusing on canine anatomy and physiology including directional terminology, anatomic planes, bones, muscles, joints, ligaments and tendons, the nervous system and lymphatics, this course will be, an in-depth study requiring students to name and explain the function of the components of the skeletal and muscle systems, including, muscle origins and insertions, muscle function and muscle innervation and blood supply.

## **RE1045 Introduction to Modalities**

This course provides an in-depth introduction to therapeutic modalities used in companion animal physical rehabilitation. Students will explore the history, scientific basis, and practical applications of various modalities, including massage therapy, laser therapy, ultrasound, electrical stimulation, hydrotherapy, and emerging techniques. The course emphasizes evidence-based practice, ethical considerations, and the integration of multiple modalities for optimal patient outcomes.

## **RE1055 Applied 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.

#### Semester 2

## **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.

### **RE2011 Placement for Case Studies**

This field placement provides students with supervised, hands-on experience in a professional rehabilitation setting. Students will apply their knowledge of various rehabilitation techniques, assess patient conditions, implement treatment plans, and refine their clinical skills in real-world scenarios. Emphasis is placed on specialized therapeutic modalities, including Laser Therapy, Hydrotherapy/Aquatherapy, Therapeutic Ultrasound, Pulsed Electromagnetic Field Therapy, Electrical Stimulation Therapy, and Shockwave therapy.

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## **RE2012 Companion Animal Rehab Seminar II**

Through weekly instructor-led meetings, the Companion Animal Rehabilitation Seminars engage in discussions and explore key questions within the program. The course will cover advances in the Companion Animal Rehabilitation industry, sharing and presenting real-world case studies, and fostering a collaborative learning environment. This seminar aims to equip students with comprehensive knowledge and practical skills essential for a successful career in animal rehabilitation.

## **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.