

PHYSICAL THERAPY

Departmental Facilities

The School of Rehabilitation Therapy is housed in the Louise D. Acton building. Teaching laboratories, student meeting space, research space and clinical services are located on the ground floor and first floor. Administration and faculty offices are on the second floor. Research laboratory facilities are located in the LDA building, Hotel Dieu Hospital, Kingston General Hospital, Providence Care, and the Human Mobility Research Centre (KGH). Research spaces are well equipped to support various research programs in the study of normal and abnormal human movement, motor control, human neurophysiology cardiovascular and skeletal muscle function, and a broad range of disability and wellness in the community studies. Projects may also be undertaken in a variety of clinical and community settings external to the School of Rehabilitation Therapy.

Admission Requirements

All applications will be processed through the Ontario Universities Application Centre, Ontario Rehabilitation Sciences Programs Application Service. (www.ouac.on.ca/orpas/ (<http://www.ouac.on.ca/orpas/>)).

Applicants are selected on the basis of a strong academic record and the assessment of personal characteristics considered most appropriate for the study of Physical Therapy at Queen's University and the subsequent practice of Physical Therapy.

Applicants must have a four year baccalaureate degree and a minimum of a second class standing (70%+) from a recognized university. In addition, applicants must have completed a course in introductory psychology and courses with substantive content in statistics, human anatomy and physiology at the undergraduate level.

In addition to academic achievement, applicants must show, through documentation of volunteer work, community service or personal experience, their strong interest in the profession of physiotherapy, knowledge of the profession and desire to work with people of all ages and abilities/disabilities. Two letters of reference and a personal information submission are required.

Faculty

Vice-Dean (Health Sciences) and Director
Finlayson, M.

Associate Director, Physical Therapy Program
Miller, J.

Professor

Hopkins-Rosseel, D., Norman, K., Pedlar, D.

Associate Professor

Deshpande, N., Parsons, T., Pelland, L.

Assistant Professor

Auais, M., Booth, R., DePaul, V., Fakolade A., Ghahari, S., Miller, J.,

Professor Emeritus

Culham, E., Olney, S.J.

Adjunct Professor

Aiken, A., McLean, L.

Adjunct Assistant Professor

Beamish, N.

Continuing Adjunct Lecturer

Law, M., Leverette, G.

Programs

- Physical Therapy - Master of Science Physical Therapy (<https://queensu-ca-public.courseleaf.com/archive/2022-2023/graduate-studies/programs-study/physical-therapy/physical-therapy-mscpt/>)

Courses

PT 822 Business Practices in Rehabilitation

Weight= 3 credit units

This course encompasses the areas of public versus private sector business practices, including, but not limited to, finance, accounting, human resources, venues, marketing/advertising, and negotiation. The emphasis will be on the practical application of the material and, normally, the development of a useable business plan. Community practitioners and small business leaders act as Community Advisors and/or assist in the delivery of this course. The intent of this learning opportunity is to facilitate the students' acquiring the fundamental business skills necessary for career development in any sector of health care. PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program and PT 883, or approval from the PT Program.

PT 841 Professional Practice

Weight = 4 credit units

This course covers 8 broad areas of rehabilitation practice including: the Canadian health care system, the rehabilitation professions, professionalism, jurisprudence (legislation and regulation) in rehabilitation, biomedical ethics and



ethical issues in rehabilitation, the cultural competency continuum in practice, educational theory and its applications in rehabilitation and health and disability. This framework is to be used by the student as a reference and knowledge base to be accessed throughout their university education and, subsequently, as a foundation for clinical practice. The theoretical basis for all topic areas will be discussed and the essentials for the development of a basic level of problem solving skills in the practical applications of professional issues and clinical education theory will be reviewed and practiced.

PT 850 Functional Anatomy

Weight= 4 credit units

Students will consolidate knowledge about gross and functional human anatomy as a foundation for the musculoskeletal and cardiorespirology courses which relate to physical therapy assessment and intervention planning. Musculoskeletal structures of the upper limb, lower limb, head, cervical, thoracic, lumbar and pelvic regions will be reviewed, including details of how muscles and joints function. Neural, cardiovascular, and pulmonary structures will be reviewed, focusing on structures in which pathology leads or contributes to movement dysfunction. Lab Component.

PT 851 Muscle and Joint Function

Weight = 4.5 credit units

This course will advance students' knowledge in functional anatomy, joint biomechanics and muscle neurophysiology, with specific application to the clinical assessment of upper and lower limb function. Exercise prescription guidelines for muscle strength, power and endurance will be introduced, and a general framework for exercise prescription in clinical practice developed. Lab Component.

PT 852 Electro-physical agents

Weight = 4.5 credit units

Students will gain knowledge of the physical principles underlying the application of electro-physical agents (EPAs) for therapeutic and diagnostic purposes. Upon completion of the course students will be able to describe the physiological effects, indications, precautions, contra-indications and application techniques of selected EPAs. These topics will include discussion of pain, inflammation and regaining joint mobility. Students will demonstrate clinical decision making related to the use of EPAs, which will include incorporating research evidence to inform their practice. Students will also demonstrate understanding of the fundamental principles of diagnostic imaging of the musculo-skeletal system. Lab component.

PT 853 Foundational Clinical Skills

Weight = 4.5 credit units

Students will apply their knowledge of professional issues, anatomy, physiology, biomechanics, physical assessment and intervention to develop skills in patient interactions and handling, mobility and function. Topics include communication skills, documentation, balance and coordination, gait, mobility aids, wheelchairs, transfers, functional task analysis & outcome measures, and hydrotherapy. Using a case-based approach, students will be able to assess and interpret findings with regard to altered mobility. Lab component.

PT 854 Diagnosing Dysfunction

Weight = 4.5 credit units

Students will apply knowledge in anatomy, physiology and biomechanics towards processes of diagnosing physical dysfunction. Students will gain skills in history-taking, physical assessment, and clinical reasoning to assist with the diagnosis and treatment of conditions primarily involving the extremities. Lab component.

PT 855 Cardiorespiratory Function I

Weight = 4.5 credit units

Students will gain knowledge in surface anatomy, pathophysiology, physical assessment and intervention related to exercise capacity, mobility and function. Conditions that affect function due to limitations or variation in gas exchange will be included, whether they are primarily cardiac, respiratory, neurological or musculoskeletal. The emphasis will be on effective assessment and treatment of conditions that affect primarily a single body system. Lab component. PREREQUISITES: successful completion of PT 850, PT 851, PT 852, PT 853, PT 854, and PT 881, or approval from the PT Program.

PT 856 Neuromotor Function I

Weight = 4 credit units

Students will gain knowledge in the neuroanatomical and neurophysiological bases of motor performance. Students will also learn how to integrate this knowledge for interpreting clinical presentation of representative pathological conditions that compromise neuromotor performance in adults. In the neuroanatomy lab component, students will develop three dimensional knowledge of the human nervous system through study of anatomical specimens. In the clinical lab component students will learn skills in clinical assessment of sensory-motor functions. Understanding the conceptual neurophysiological basis of clinical assessment tools will be emphasized. PREREQUISITES: successful completion of PT 850, PT 851, PT 852, PT 853, PT854, and PT 881, or approval from the PT Program.

PT 857 Cardiorespiratory Function II

Weight = 4.5 credit units

Students will gain proficiency in applied exercise physiology and produce safe and effective exercise prescriptions in clinical populations. In addition, students will incorporate their critical thinking, problem solving and clinical skills in the study of complex cardiorespiratory cases related to rehabilitation, acute and critical contexts of care. Topics include physiological monitoring, oxygen delivery and ventilation. Lab component.
PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program, or approval from the PT Program.

PT 858 Neuromotor Function II

Weight= 4.5 credit units
Students will gain knowledge regarding a range of conditions that compromise neuromotor performance in adults. Students will gain skills in identifying movement problems, setting goals and planning physiotherapeutic intervention for adults with compromised neuromotor performance. Lab component.
PREREQUISITES: successful completion of PT 850, PT 851, PT 852, PT 853, PT854, and PT 881, or approval from the PT Program.

PT 859 Spinal Disorders

Weight= 4.5 credit units
Students will gain knowledge in anatomy, physiology, biomechanics, physical assessment and clinical reasoning in order to assist with intervention related to disorders of the axial skeleton including musculoskeletal, neurological, and cardiorespiratory sequelae. The emphasis will be on conditions that occur in adulthood. Lab component.
PREREQUISITES: successful completion of PT 850, PT 851, PT 852, PT 853, PT854, and PT 881, or approval from the PT Program.

PT 861 Paediatrics

Weight= 4.5 credit units
Students will gain knowledge of typical and atypical development, and skill in assessment of children and youth with selected developmental, neurological and orthopaedic conditions. Changes in musculoskeletal status, movement coordination, exercise capacity, posture and gait control, and motor learning will be included. Principles of family-centered and interprofessional care will be applied. Students will gain an understanding of the leadership and advocacy roles of physiotherapists within the contexts of paediatric care including end-of-life issues. Lab and Interprofessional components. PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program, or approval from the PT Program.

PT 863 Gerontology

Weight= 4 credit units

Students will gain knowledge and skill in applying assessment principles related to representative conditions common in older adults. Changes in musculoskeletal status, exercise capacity and neuromotor control with aging are included. Students will gain understanding of the need for advocacy and education in the contexts in which physical therapists work with older clients. Social and cognitive factors that may affect the motor function of older adults are discussed. End of life and palliative care issues are included. Lab component
PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program, or approval from the PT Program.

PT 864 Complex Health Conditions

Weight= 4 credit units
Students will gain knowledge about the ways in which clients may present with movement dysfunction arising from multiple causes including disorders of musculoskeletal, neurological and cardiorespiratory functions. Students will develop skills to systematically assess complex, unforeseen problems and deliver patient-centred care. This course consists of five modules: a) rheumatology, b) lower extremity amputations, c) burn injury, and d) oncology and e) narrative practice. Clinical Skills Lab Component.
PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program and PT 883, or approval from the PT Program.

PT 865 Motor Function Occupation

Weight= 4.5 credit units
Students will gain knowledge and skill in the assessment and management of individuals with musculoskeletal injuries related to physical work, sport and leisure activities. They will be able to critically evaluate the literature related to ergonomic assessment and intervention, including psychophysical, physiological and biomechanical approaches. Topics in occupational health and safety related to injury prevention, as well as advanced manual therapy approaches to the assessment and management of musculoskeletal injury will be included. Lab component.
PREREQUISITES: successful completion of all Year 1 courses in the MScPT Program, or approval from the PT Program.

PT 881 Clinical Placement I

Weight= 6 credit units.
A 6-week full-time placement providing experience in physiotherapy practice in a clinical facility or community-based agency. During their first clinical placement students will be expected to apply the skills, knowledge and behaviours presented during the first two academic blocks, with a focus on musculoskeletal physiotherapy practice. By the end of the clinical placement students should be proficient in assessment and management skills, able to provide quality care to clients with non-complex, single system, primarily musculoskeletal conditions, with



guidance and supervision. Interprofessional component.
PREREQUISITES: PT 850, PT 851, PT 852, PT 853, & PT 854 or approval from the PT program.

PT 882 Clinical Placement II

Weight= 6 credit units.

A 6-week full-time placement providing experience in physiotherapy practice in a clinical facility or community-based agency. During their second clinical placement students will be expected to apply the skills, knowledge and behaviours that were presented during the Year I academic blocks. By the end of the clinical placement students should be proficient in assessment and management skills with single system to more complex representative musculoskeletal, neurological or cardiorespiratory conditions in adults.

PREREQUISITES: successful completion of PT 841, PT 850, PT 851, PT 852, PT 853, PT 854, and PT 881, or approval from the PT Program.

PT 883 Clinical Placement III

Weight= 6 credit units.

A 6-week full-time placement providing experience in physiotherapy practice in a clinical facility or community-based agency. During their third clinical placement students will be expected to further develop their skills, knowledge and behaviours and integrate material presented during the academic blocks VII and VIII. By the end of the clinical placement students should be developing increased proficiency in assessment and management skills with single system to more complex representative conditions involving all body systems.

PREREQUISITES: PT 882, PT 863, PT 861 and/or PT 857 or approval from the PT Program.

PT 884 Clinical Placement IV

Weight= 6 credit units.

A 6-week full-time placement providing experience in physiotherapy practice in a clinical facility or community-based agency. During their fourth clinical placement students will be expected to further develop their skills, knowledge and behaviours and integrate material presented during block 10 in year two. By the end of the clinical placement students should have developed skills to work efficiently as a member of a multidisciplinary health care team, providing consultation and care to clients of all ages and with simple to complex conditions. In addition, students will be expected to demonstrate knowledge of the business, administrative and legal issues related to clinical practice.

PREREQUISITES: successful completion of PT 883, PT 857, PT 861, PT 863, PT 864, and PT 865, or approval from the PT Program.

PT 885 Clinical Placement V

Weight= 6 credit units

A 6-week full-time placement providing experience in physiotherapy practice in a clinical facility or community-based agency. Students will be expected to consolidate their skills, knowledge and behaviours and integrate all material presented throughout the academic curriculum. By the end of the final clinical placement students should be able to consistently and efficiently provide quality care with simple and complex clients of all ages in a variety of clinical environments, requiring guidance or supervision only when addressing new or complex situations. Students will be expected to demonstrate knowledge of the business, administrative and legal issues related to clinical practice. Students will be ready for independent clinical practice.
PREREQUISITES: PT 884 or approval from the PT Program.

PT 897 Critical Enquiry Foundations

This course prepares students for the completion of PT 898 by examining world views, research designs, criteria for study quality, and evidence-based practice. Students develop skills to pose clinical questions, systematically search the literature, appraise scientific articles, and use research to inform rehabilitation practice.

PREREQUISITE: Registration in the physical therapy program.

PT 898 Critical Enquiry Project

Weight=6 credit units

Students will work with a faculty supervisor to complete a critical enquiry project. The project will enable students to apply critical inquiry skills by participation in an area of clinical investigation and to examine the relevance of findings to clinical practice.

PREREQUISITES: PT 897 or permission of the course coordinator.