## **DEPARTMENT OF PHYSICAL THERAPY MISSION**

The Department of Physical Therapy is committed to being an internationally significant university department in the promotion, development, and dissemination of research and education in the science of Physical Therapy through its activities and partnerships with internal and external communities.

## **PROGRAMS**

## **Master of Science in Physical Therapy**

The Master of Science in Physical Therapy is a professional program leading to entry to practice, accredited by Accreditation Council for Canadian Physiotherapy Academic Programs (ACCPAP). Graduates will be eligible to write the Physiotherapy Competency Examination (PCE) of the Canadian Alliance of Physiotherapy Regulatory Boards, which qualifies them to practice physical therapy in Canada. Graduates will be eligible to register in the Canadian Physiotherapy Association and the Colleges of Physiotherapy in all Canadian provinces. As the MScPT program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA), graduates are also eligible to apply for licensure in the United States.

## Master's of Science in Physical Therapy Advanced Standing Option

The Master of Science in Physical Therapy Advanced Standing Option is a professional graduate degree program that allows physical therapists (with advanced standing) to acquire the entry-to-practice degree on a part-time basis in an online, learning environment with two on-campus residencies. Themes of research, business, and professional practices are integrated throughout the curriculum. Students complete a group research project during this one-year program. The Department of Physical Therapy, University of Toronto, will consider applications from students who have completed a four-year undergraduate program BScPT degree in Canada (or Quebec equivalent) with a minimum mid B average.

## **Degrees of MSc/PhD (Rehabilitation Science)**

The MSc and PhD degree programs in Rehabilitation Science are research-oriented programs for students with a professional physical therapy degree; they do not prepare students for physical therapy, clinical practice, or licensure. The primary objective of the MSc and PhD programs is to prepare students for research careers in Rehabilitation Science. (For further details, see rehab.science@utoronto.ca.)

## HISTORY OF THE DEPARTMENT OF PHYSICAL THERAPY

The first program in Physical Therapy in Canada was established in the Department of Extension at the University of Toronto in 1929. It was a two-year program followed by six months of clinical practice, leading to a diploma in Physiotherapy. In 1946, the two-year program was lengthened to three years with three months of clinical practice. It remained in the Department of Extension and a diploma was granted in Physiotherapy.

In 1950, the program was transferred into the Faculty of Medicine and combined with Occupational Therapy. The impetus behind combining the programs was financial; in the period following World War II, hospitals often did not have the financial resources for two separate positions. It was also thought that the two professions had a great deal of similarities and the combination of the two would produce a more diversified professional. This program was three years in length with eight months of clinical practice to be completed before graduates could be recognized by the professional associations. Graduates achieved a diploma of Physical and Occupational Therapy.

The combined program continued until 1971, when a four-year Bachelor of Science in Physical Therapy was introduced in the Department of Rehabilitation Medicine, Faculty of Medicine. At this time, 16 weeks of clinical practice were required in two eight-week Modules. The program underwent continual modification throughout the years.

In 1993, the Division of Physical Therapy became the Department of Physical Therapy, thereby achieving increased autonomy over the curriculum and the direction of the program. The four-year direct-entry program consisted of Basic Science courses, Clinical Science courses, Core Physical Therapy courses, seven and a half electives from Arts and Science, and a total of thirty weeks of clinical practice. This curriculum was referred to as the "Classic Curriculum."

As of 1995, the program became a second-entry level program, three years in length, leading to a Bachelor's of Science in Physical Therapy (BSc(PT)). The program emphasized evidence-based practice, critical thinking and integration of basic and clinical sciences. The program provided a unique exposure to a variety of educational strategies within the University and the community.

The Master's of Science in Physical Therapy (MScPT) started in 2001 and replaced the BScPT program. The first class graduated in November 2003. The program has been consolidated into 24 months, from the original 26 months, effective the fall of 2007. The MScPT is a professional program that requires the completion of a four-year undergraduate degree for admission. It enhances and expands upon the foundations of the Evidenced-Based Curriculum through implementation of the enhanced Best Practices. The purpose of the Master's of Science in Physical Therapy is to graduate academic physical therapy practitioners who will demonstrate:

#### 1. Best Practices

- share their knowledge with students, clients, policy makers, and other professionals in academic health science environments have enhanced competency in clinical skills
- participate in clinical and health care research, contributing to the overall body of scientific knowledge
- be cognizant of advanced technological practice

## 2. Professionalism

- have ability to act as self-regulating professionals who exhibit strong personal, moral, and ethical values
- be cognizant of the changing laws, codes, and guidelines that impact on themselves and their clients
- be creative entrepreneurs with sound business acumen capable of excelling in professional practice in a wide variety of venues

## 3. Leadership

- serve as role models for students and other health professionals as expert consultants in the fields of movement and physical capacity
- serve as strong players with exemplary interpersonal skills, secure in their evolving role within changing health service delivery

## 4. Citizenship

- be innovative leaders in physical therapy, rehabilitation, and the health system

- be strong negotiators and advocates who proactively address interprofessional politics and health policy with an eye to maintaining and improving not only the health of clients but of the health system as a whole

## PHILOSOPHY OF THE BEST PRACTICES CURRICULUM

The Physical Therapy Best Practices Curriculum is committed to the development of highly competent academic practitioners who will be equipped with the knowledge, skills and attitudes to provide best practices in both private and public funded environments. This competence will entail acting on the professional principles and general strategies embedded in the practice of Physical Therapy. Central to the goals of the program is the assumption that graduates will be able to gather and analyze evidence, identify professional issues, render sound decision-making, exercise good judgment and engage in evidence-based practice. Graduates will practice in unique, complex situations that demand insights and understanding of conflicting values and ethical stances in varied social, cultural and organizational contexts. They will be expected to develop confidence, competence and ethical sensitivity towards individuals and groups and demonstrate these attributes in their clinical practice.

The Best Practices Curriculum challenges the students to engage in systematic inquiry, fosters critical thinking, enhances moral reasoning, encourages problem solving and nurtures the integration of scientific knowledge, physical therapy skills and professional attitudes. The Department seeks applicants who display the fundamental attributes that will develop practitioners congruent with the educational philosophy of the program.

### **Educational Principles**

#### **Integration of Clinical and Basic Sciences**

Opportunities are provided within the curriculum to integrate knowledge from both the clinical and basic sciences in order to understand and apply the concepts of evidence-based practice. Students learn to utilize the concepts and applications in the context of the changing health care system. An emphasis is placed on movement, which occurs on a continuum from the microscopic level to the level of the individual in society. Movement is influenced by life span. Both the client and the physical therapy delivered are affected by human development, growth, and the aging process.

#### **Evidence-Based Practice**

Scientific inquiry skills and integration of evidence-based principles into clinical decision-making are fundamental in the curriculum. Students develop their abilities to critically analyze and problem-solve, integrating information from empirical, scientific literature and practical experience. Physical therapy is practiced across a continuum of care where therapeutics are delivered in acute, rehabilitative, chronic and community settings to address impairments, disabilities, and in some instances, handicaps. Students are able to render sound clinical judgments and to continually evaluate their findings and therapeutic approaches.

#### **Development of Professionalism and Interprofessional Education**

Students learn and develop the skills essential to become health care professionals. Professional values, responsibility, accountability, sensitivity and ethical attitudes towards both the consumer and health care community are emphasized. Development of effective verbal and written communication is fostered throughout the program. Students learn to evaluate and consider the implications of their professional actions. Students are provided with opportunities to have interprofessional mentoring, to learn from faculty from diverse disciplines and interact with small groups of interprofessional students in the clinical setting.

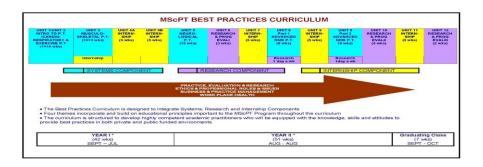
## **Multiple Educational Strategies**

Professional education requires students to engage in diverse and varying learning experiences and types of evaluation. The complexity of the learning experiences evolves throughout the program. Students are also encouraged to develop a sense of responsibility for their education and professional development. Collaborative learning experiences are fostered with students, faculty, physical therapy practitioners and other members of the health care system.

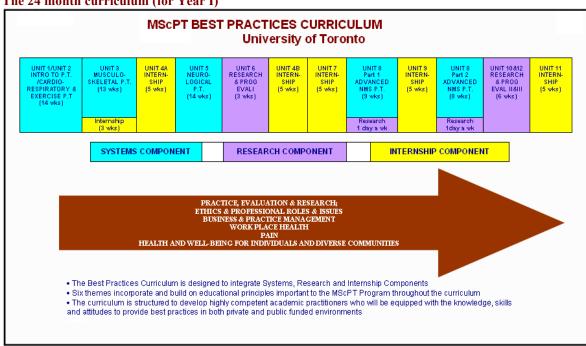
#### **Structure of the Best Practices Curriculum**

(Two curricula will be running this year: one, the 26 month curriculum, commencing in 2001, will finish in 2008; the other, the 24 month curriculum, will begin in the fall of 2007.)

### The 26 month curriculum (for Year II)



The 24 month curriculum (for Year I)



The MScPT Best Practices Curriculum is designed to integrate Systems, Research and Internship

Components organized in twelve units to maximize educational principles. Four major themes are integral to the curriculum. Educational strategies for the program will be lectures, seminars, tutorials, laboratories, case-based learning, structured clinical sessions, integrated sessions, structured site visits, and clinical internships. An enhanced research approach has been added to the curriculum. Students are required to take all units.

## **Components**

- 1. Systems Component: (Units 1, 2, 3, 5 and 8). This component is designed to provide the basic and clinical sciences of physical therapy; the principles of assessment, management, measurement and outcomes of evidence-based practice for the major systems that are integral to the practice of physical therapy. Therapeutic approaches are incorporated into the curricular design. These include: health promotion and disability prevention, therapeutic intervention, minimization of disability and optimization of ability, and restoration of functional capacity.
- 2. Research Component (Units 6, 10 and 12). This component is designed to integrate practice in physical therapy with research and program evaluation. The focus of this unit is on developing student's skills in critical appraisal, critical thinking and problem solving. A research project is introduced as part of the requirement of the program, under supervision of a practitioner and an academic faculty. The project will be presented at a formal Research Day.
- **3. Internship Component:** (Units 4, 7, 9 and 11). This component is designed to provide the opportunity to integrate the professional systems and research components while continuing to learn in practice settings, and develop clinical competence.

## **Unit Weights**

Compulsory Courses	Credits	Marking
Year 1		
Designation		
PHT1001H - Intro to Professional PT Practice, Evaluation and Research	0	H/P/FZ
PHT1002Y - Cardiorespiratory & Exercise Physical Therapy Practice	3.00	GRADE
PHT1003Y - Musculoskeletal Physical Therapy Practice	3.00	GRADE
PHT1004Y - Clinical Internship - Cardiorespiratory	0.75	H/P/FZ
PHT1014Y - Clinical Internship - Musculoskeletal I	0.75	H/P/FZ
Year 2		
PHT1005Y - Neurological Physical Therapy Practice	3.5	GRADE
PHT1006Y - Research & Program Evaluation for Physical Therapy Practice I	0.75	GRADE
PHT1007Y - Clinical Internship - Neuroscience	0.75	H/P/FZ
PHT1008Y - Advanced Neuromusculoskeletal Physical Therapy Practice	2.75	GRADE
PHT1009Y - Clinical Internship - Musculoskeletal II	0.75	H/P/FZ
PHT1010Y - Research & Program Evaluation for Physical Therapy Practice II	0.75	H/P/FZ
PHT1011Y - Clinical Internship - Selective	0.75	H/P/FZ
PHT1012Y - Research & Program Evaluation for Physical Therapy Practice III	1.0	GRADE
Overall Total (Years 1 & 2)	18.50	

(70% is a passing grade for MScPT students. H/P/FZ=Honors/Pass/Fail)

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## **Units of Instruction**

#### First Year

(The 24 month curriculum is running in the first year in which there are units 1&2, 3, and part of 4 and 5.)

## Unit 1 and 2 - PHT1001H and PHT1002Y

## (Introduction and Cardiorespiratory & Exercise Physical Therapy Practice, 14 weeks)

In this unit, students are introduced to the field of Physical Therapy, disability studies and how science, practice, evaluation, research, business and ethics are integrated into the field. This unit also integrates the principles of cardiopulmonary anatomy and physiology, exercise physiology, clinical pathobiology and dysfunction with the assessment, analysis and management of clients with acute or chronic respiratory and/or cardiovascular conditions. The content in this unit is critical to the holistic and comprehensive management of all clients. Evaluation of practice and clinical problem solving provide opportunities to develop an understanding of both the science and practice of Physical Therapy.

## **Unit 3 - PHT1003Y**

## (Musculoskeletal Physical Therapy Practice, 16 Weeks)

This unit introduces the principles of assessment and treatment of the musculoskeletal system based on an approach that integrates scientific and biomechanical principles with basic clinical skills. Content includes connective tissue structure and pathophysiology as they relate to musculoskeletal disorder, a systematic study of joints (peripheral and central), posture and gait. Professional and ethical practice issues are expanded from topics in Unit 2 and integrated throughout the unit. Learning strategies include small-group work, seminars, lectures, structured independent study units, clinical skills laboratories, tutorials and structured clinical sessions. This unit also includes a three week clinical internship focusing on mobility, transfers, interviewing, interacting with patients and health care teams while demonstrating safe and professional practice.

## **Structure and Function Component**

The structure and function component (Anatomy, Biomechanics, Physiology and Pathology) runs concurrently and integratively with Units 1, 2 and 3. Lectures, laboratories, tutorials and case-based learning approaches are provided to assist with the integration of the clinical and basic sciences.

#### **Unit 4 - PHT1004Y**

## (Clinical Internship – Cardiorespiratory & Exercise Physical Therapy Practice, 5 weeks)

This clinical unit provides the opportunity for students to integrate the theory and science into the practice of Physical Therapy, focusing on general Physical Therapy practice including themes of exercise and cardiorespiratory Physical Therapy practice. Students who have successfully completed all components of the program up to Unit 4 are given the opportunity to apply their skills in a clinical setting. Students will be required to spend five full-time weeks in approved Physical Therapy sites coordinated by the Director of Clinical Education & Community Affairs.

#### **Unit 4 - PHT1014Y**

## (Clinical Internship – Basic Musculoskeletal Physical Therapy Practice, 5 weeks)

This clinical internship unit provides the opportunity for students to integrate the theory and science into the practice of Physical Therapy, focusing on themes of mobility and basic musculoskeletal Physical Therapy practice. Students who have successfully completed all components of the program up to Unit 4 are given the opportunity to apply their skills in a clinical

setting. Students will be required to spend five full-time weeks in approved physical therapy sites coordinated by the Director of Clinical Education & Community Affairs.

### **Unit 5 - PHT1005Y**

## (Neurological Physical Therapy Practice, 14 weeks)

Unit 5 integrates the science of neuroanatomy, neurophysiology and neuropathology with the principles of movement dysfunction to the assessment, analysis and management of clients with neurological disorders. A client-centred approach to the management of neurological conditions is promoted, across the lifespan, based on the best available evidence. Also emphasized is a multidisciplinary approach to the care of clients with neurological dysfunction. Students are exposed to the various roles of the multidisciplinary team throughout the course content. Learning strategies include small group work reviewing cases as well as lectures, clinical skills laboratories, structured clinical sessions and independent study time.

#### **Second Year**

(The 26 month curriculum is still running for this year and will be phased out after Unit 12.)

### **Unit 5 - PHT1005Y**

## (Neurological Physical Therapy Practice, 15 weeks)

Unit 5 integrates the science of neuroanatomy, neurophysiology and neuropathology with the principles of movement dysfunction to the assessment, analysis and management of clients with neurological disorders. A client-centred approach to the management of neurological conditions is promoted, across the lifespan, based on the best available evidence. Also emphasized is a multidisciplinary approach to the care of clients with neurological dysfunction. Students are exposed to the various roles of the multidisciplinary team throughout the course content. Learning strategies include small group work reviewing cases as well as lectures, clinical skills laboratories, structured clinical sessions and independent study time.

#### **Unit 6 – PHT1006Y**

## (Research and Program Evaluation for Physical Therapy Practice I, 3 weeks)

This is the first of three units integrating practice in physical therapy with research and program evaluation. The focus of this unit is on further developing student's skills in critical appraisal, critical thinking and problem solving. Students will be introduced to a wide range of research designs currently being applied in the field of physical therapy spanning both qualitative and quantitative methodologies. Learning strategies include seminars, small group work, in-depth analysis of the literature and both written and oral presentations. Students will develop their protocol for a clinical research project, which will be conducted in the remainder of the year.

#### **Unit 7 – PHT1007Y**

## (Clinical Internship – Neurological Physical Therapy Practice, 5 weeks)

This clinical unit provides the opportunity for students to integrate the theory and science into the practice of Physical Therapy, focusing on neurological Physical Therapy practice. Students who have successfully completed all components of the program up to Unit 7 are given the opportunity to apply their skills in a clinical setting. Students will be required to spend five full-time weeks in approved Physical Therapy sites coordinated by the Director of Clinical Education & Community Affairs.

#### **Unit 8 – PHT1008Y**

## (Advanced Neuromusculoskeletal Physical Therapy Practice, 17 weeks)

This unit will provide students with the opportunity to expand their knowledge relating to the pathophysiology and management of selected neuromusculoskeletal conditions and to further develop basic physiotherapeutic skills in assessment and management of neuromusculoskeletal

conditions. The unit promotes a client centred approach to management and a progressive professional perspective by providing strategies and opportunities for the integration of knowledge from across the curriculum. Learning strategies include lectures, laboratories, small group work and structured clinical sessions. The unit is divided into two sections with an internship in the middle to enhance skills (Unit 9).

## **Unit 9 - PHT1009Y**

## (Clinical Internship – Advanced Musculoskeletal Physical Therapy Practice, 5 Weeks)

This clinical unit is embedded within Unit 8 to provide the opportunity for students to integrate the theory and science of the field of neuromusculoskeletal into practice. The foci will be on the development of advanced clinical neuromusculoskeletal skills as they relate to the complex client and evolution towards the advanced practitioner. Students will be required to spend five full-time weeks in approved Physical Therapy sites coordinated by the Director of Clinical Education & Community Affairs and faculty.

#### **Unit 10 – PHT1010Y**

# (Research and Program Evaluation for Physical Therapy Practice II, 5 weeks)

The unit is an internship where students are conducting a clinical research project that was conceived in Unit 6. These research internships will be conducted in student groups of four. The group will have two advisors for their project, one academic and one professional clinician. Opportunities for business and resource management research projects will be available. The projects will be conducted in Physical Therapy sites that have a research infrastructure to support the project.

#### **Unit 11 – PHT1011Y**

## (Clinical Internship – Selective Physical Therapy Practice, 5 weeks)

This clinical unit provides the opportunity for students to integrate the theory and science into the practice of Physical Therapy, focusing on the varied roles of the Physical Therapist across the health care system. Students who have successfully completed all components of the program up to Unit 11 are given the opportunity, in this final clinical internship, to apply their skills in a particular interest area of clinical practice or an area needed for completion of the program (e.g. geriatrics). Students will be required to spend five full-time weeks in approved Physical Therapy sites coordinated by the Director of Clinical Education & Community Affairs.

#### **Unit 12 – PHT1012Y**

### (Research and Program Evaluation for Physical Therapy Practice III, 2 weeks)

In the first week of this final research unit, the students will focus on the dissemination of the results of their research projects in written and oral formats. In addition, students will learn about the principles of knowledge transfer regarding research findings. The primary goals of the unit are for the students to develop a podium style presentation of their projects results that will be presented at a formal Research Day. Students will also complete the writing of the major paper according to the publication guidelines for a clinical research article for a professional journal. During the second week of the unit, the emphasis will be on specific ethical/professional and health system issues for the graduating physical therapist.

## **Selective Unit: PHT 1015Y**

# (Clinical Internship – Physical Therapy Practice, 5 weeks)

This clinical unit provides the opportunity for students to integrate the theory and science into the practice of Physical Therapy, focusing on a specific area of Physical Therapy. It may replace any of PHT1004Y, PHT1014Y, PHT1007Y, PHT1009Y, or PHT1011Y. Students who have

successfully completed PHT1001H, PHT1002Y, PHT1003Y are given the opportunity to apply their skills in a clinical setting. Students will be required to spend five full-time weeks in approved Physical Therapy sites coordinated by the Director of Clinical Education & Community Affairs.