

UNIVERSITY OF TORONTO
Faculty of Medicine

Department of Physical Therapy
1995-1996 Calendar

Bachelor of Science (Physical Therapy)

CLASSIC CURRICULUM (entry to Bachelor of Science (Physical Therapy) Program prior to 1995)

There are currently three years of the Classic Curriculum still enrolled in the program. The last of these students will graduate in the summer of 1998. The structure of the program is designed in four blocks of courses:

Sciences Basic to Physical Therapy provide the necessary background to understand normal human function.

Clinical Physical Therapy Sciences integrate the pathological process and the impairment of function with the total therapeutic approach.

Applied Therapeutics teaches the student through clinical practice to participate in the treatment of patients to restore function.

Arts & Science Courses are designed to complement the required courses by providing a humanities balance with the physical sciences. Eight full course equivalents must be successfully completed, including: *Biology 150Y or Physics 138Y and Psychology 100Y or Sociology 101Y* in Year I, as well as a half-course in Statistics - either *STA 220H or PSY 201H* in Year II. Courses may be taken at other universities during the summer with a Letter of Permission obtained from the Administrative Assistant, Student Services. Correspondence courses are not acceptable to meet the degree requirements.

Clinical Placements

The University Coordinator of Clinical Education is responsible for arranging all clinical placements.

No student may undertake to make his/her own arrangements with the Clinical Facilities.

Although every effort will be made to place students in their preferred area, the Department of Physical Therapy reserves the right to place students where and when it finds it necessary to meet the needs of the student's program.

Students are reminded that placements are *limited* and *subject to availability*. Students, therefore, may be required to complete their clinical course requirements outside of their area of preference/residence. In this situation, accommodation and travel expenses are the responsibility of the student.

Second Year

Neuroanatomy	ANA210F
Pathology	PAT204H
Biomechanics	PHT200Y
Introduction to Physical Therapy Assessment	PHT210Y
Electrotherapy	PHT235H
Physiology	PSL210Y
The Practice of Statistics or Research Design and Analysis in Psychology II	STA220H
Clinical Preparation and Clinical Practice	PSY201H
Arts & Science Courses (1.5)	PTI 210B

Third Year

Clinical Orthopaedics	PHT320Y
Cardiorespiratory Physical Therapy	PHT340Y
Exercise Physiology	PHT351S
*Independent Study	PHT345Y
Clinical Neurology	PHT355Y
Scientific Enquiry	PHT361H
Clinical Practice	PTI 310B
Arts & Science Courses (2)	

* PHT 345Y can be taken instead of one Arts & Science course.

Fourth Year

**Exercise Physiology and Assessment	PHT410F
**Gerontology in Physical Therapy	PHT411F
**Paediatrics in Physical Therapy	PHT412F
**Clinical Rheumatology in Physical Therapy	PHT413F
**Physical Therapy in Sports	PHT414F
**Art & Science In Orthopaedic Physical Therapy	PHT416F
**The Physical Therapist as Educator	PHT417F
**Practice Management	PHT418F
Health Care Delivery System	PHT440F
Literature Review	PHT444F
Independent Study	PHT445Y
Disordered and Restorative Motor Control	PHT450A
Clinical Practice	PTI 410B
Arts & Science Courses (2)	

**Selectives

Key for Curriculum course designations is as follows:

Y = Full Course - Fall (F) and Spring (S) Terms
A = Full Course - F
B = Full Course - S
H = Half Course - F&S
F = Half Course - F
S = Half Course - S

COURSE DESCRIPTIONS**SECOND YEAR - CLASSIC CURRICULUM**

ANA 210F Neuroanatomy A half course to study the central nervous system. Lectures, laboratories and tutorials emphasize the functional aspects of the human brain and spinal cord.

PAT 204H Pathology A course designed to introduce the student to pathology. Basic principles of pathophysiology as they impact on physical therapy practice are covered in both lectures and case-study format. Two (2) hours/wk both terms.

PHT 200Y Biomechanics A full course designed to provide a basic understanding of the biomechanical principles which govern human movement. The emphasis of the course is on the application of classical mechanics to the measurement, description, and analysis of human movement and movement control. Topics include kinematics, anthropometrics, kinetics, electromyography, control theory, muscle and connective tissue mechanics and ergonomics. Each topic will address the principles underlying normal and pathological movement (with specific emphasis on postural control and gait) and the biomechanical rationale for specific exercise strategies and therapeutic interventions. The course consists of lectures, laboratories and problem-solving tutorials. (Four (4) hours per week both terms.)

PHT 210Y Introduction to Physical Therapy Assessment This full course in clinical problem-solving is designed to apply the theory and principles of the science of measurement to the measurement, description and analysis of human capabilities. Emphasis is on the development of basic practical skills for the assessment of the neuromusculoskeletal and cardiorespiratory systems. Clinical problem-solving skills are integrated throughout the course to allow the student to acquire the ability to define appropriate and relevant client centred long-term and short-term goals, and to select suitable outcome measures. The course consists of lectures, laboratories, structured clinical sessions, and small group clinical problem-solving exercises.

PHT 235H Electrotherapy This half course covers the theory and application of electrotherapeutic modalities and the physiological effects of applying various forms of energy to tissues. The course consists of lectures & practical laboratory sessions. Case studies are used to integrate the material.

PSL 210Y Physiology A full course consisting of lectures supplemented with illustrations and demonstrations for the study of the various body systems, including the nervous system.

STA 220H The Practice of Statistics I An introductory course in statistical concepts and methods, emphasizing exploratory data analysis for univariate and bivariate data, sampling and experimental designs, basic probability models, estimation and tests of hypothesis in one-sample and comparative two-sample studies. A statistical computing package is used, but no prior computing experience is assumed.

Prerequisite: Grade 12 Mathematics and one University course in the physical, social, or life sciences.

OR

PSY 201H Research Design and Analysis in Psychology I Experimental design in psychological research and the statistical analysis of experimental data.

Note: A half course in statistics or research design is required.

PTI 210B Clinical Preparation and Clinical Practice This full course consists of two sections: Clinical Preparation and Clinical Practice.

(i) Clinical Preparation: This section is designed to provide basic information, policies and procedures governing clinical practice in Physical Therapy and to develop skills in identifying learning needs and setting learning objectives. This section will consist of lectures and seminars during the entire Spring term.

(ii) Clinical Practice: Students will be required to spend five weeks full-time in one of the university-approved Physical Therapy facilities during the Summer immediately following completion of the academic component of the second year of the Program. Satisfactory completion of this clinical practice course is required to advance to the subsequent clinical courses in the Program. This period will be arranged by the University Coordinator of Clinical Education.

Arts & Science Courses An advanced course in Psychology, Sociology or another Arts & Science course.

THIRD YEAR

PHT 320Y Clinical Orthopaedics This full course is designed to relate principles of musculoskeletal physiology and clinical pathology to the assessment, analysis and management of musculoskeletal conditions. The course will consist of lectures, laboratory sessions, problem-solving sessions and opportunities for structured clinical exposure.

PHT 340Y Cardiorespiratory Physical Therapy

This full course is designed to relate the principles of cardiopulmonary physiology and clinical pathology to the prevention, assessment, analysis and treatment of patients with acute and chronic respiratory and cardiovascular conditions. The course will consist of lectures, laboratory sessions, seminars and clinical instruction visits.

PHT 351S Exercise Physiology A half course which will provide students with a basic understanding of the responses, and mechanisms underlying responses, to acute and chronic exercise. Responses in both healthy and physically impaired people will be coordinated with the relevant content from clinical courses. Student learning will depend on participation in lectures, laboratories, and discussion of readings.

PHT 345Y Independent Study is a full course which is offered as an Arts & Science credit and not a replacement for PHT 445Y. It provides the student an opportunity to pursue a topic of interest and contribute to the knowledge base of physical therapy. The student may (1) conduct limited-scope *original research* on a topic related to physical therapy; or (2) conduct an *instrument development* project. Instrument development includes the development and evaluation of questionnaires, or teaching tools. **Prerequisite:** Students must have completed three years of university education **and** must receive approval from the course coordinator and the advisor for the specific topic.

PHT 355Y Clinical Neurology This full course is designed to relate principles of neurophysiology and neuropathology to the assessment, problem analysis and therapeutic management of individuals with various neurological disorders. The course will consist of lectures, laboratory sessions, seminars, and clinical instruction visits.

PHT 361H Scientific Enquiry This half course is designed for the study of the basic principles of the scientific enquiry process and its application to physical therapy. Current physical therapy literature will be used to illustrate the different elements of the process and to assist in the development of critical

appraisal skills. The course will consist of lectures and seminars.

PTI 310B Clinical Practice Students will be required to spend fifteen weeks full-time in approved Physical Therapy facilities immediately following completion of the academic component of the third year of the Program. Three five-week placements comprise the fifteen-week block of clinical practice. Satisfactory completion of this clinical practice course is required to advance to subsequent clinical courses in the Program. This period will be arranged by the University Coordinator of Clinical Education. This course covers the entire summer between Year III and Year IV. Students are encouraged to budget accordingly for the final two years of the Program.

Arts & Science Courses Two full course equivalents.

FOURTH YEAR

****Selectives** Students are required to take one half-course selective.

****PHT 410F Applications of Exercise and Work Physiology**

Students will learn a framework for assessing physical function and prescribing exercise (the *Canadian Standardized Test of Fitness*). They will apply their knowledge to older clients. Students will learn about physical therapy in the workplace including Physical Demands Analysis, Functional Capacity Evaluations, Physical Capacity Evaluations and exercise prescriptions for return to work. This course will employ lectures, seminars and clinical visits in community and hospital settings.

****PHT 411F Gerontology** A half course designed to prepare physical therapy students for clinical practice with elderly clients in different settings. Objectives of the course include development of clinical problem-solving skills specific to the needs of the elderly, understanding the difference between normal age changes and the effects of disease, as well as identification of the multiple components of the physical therapist's role in working with the elderly. The format of the course includes lectures, seminars, problem-solving with case studies, clinical visits and group presentations.

****PHT 412F Paediatrics** This half course is designed to introduce the students to the specialization of paediatric physical therapy. The pathophysiology, etiology, medical and physiotherapy assessment, and management of pathologies specific to the paediatric population are discussed. The topics covered include family involvement, developmental delay, cystic fibrosis and congenital brachial plexus injuries. The course consists of lectures, student seminar presentations and clinical instruction in the hospital setting.

****PHT 413F Clinical Rheumatology** This half course covers the medical history, pathophysiology of inflammation, drug management, quantitative assessment techniques & physiotherapeutic and multidisciplinary management of Adult Rheumatoid Arthritis. Topics covered: Juvenile Arthritis, Systemic Lupus Erythematosus, Psoriatic Arthritis, Ankylosing Spondylitis, Scleroderma and Fibrositis. The course consists of lectures, clinical overviews, clinical visits in community & hospital settings.

****PHT 414F Physical Therapy in Sports** A half course designed to introduce students to the basic concepts of sports physical therapy. In addition to examining the physical therapy management of sports injuries, students are provided with the opportunity to study common sports injuries and specialized methods of treatment. The course consists of lectures and laboratory sessions.

****PHT416F Art & Science In Orthopaedic Physical Therapy** This course will explore fundamental principles which form the foundation of orthopaedic physical therapy practice. Opportunity will exist for further integration of the science and the practice in specific speciality areas, for syndrome analysis and for the refinement of specific hands-on skills. Material will be presented in seminar, lab & clinically based sessions.

****PHT 417F The Physical Therapist as Educator** The purpose of this half course is to provide the student with the theory and skills needed to be an effective adult educator. Physical Therapists are often required to teach patients, colleagues, other health professionals and students. The course will address how adults learn, how to design, implement and evaluate educational programs and explore different methodologies of instruction. As it is oriented to both theory and skill, students are required to be active learners.

****PHT 418F Practice Management** This half course provides students with an overview of the business aspects of professional practice in a variety of settings. The financial, legal, marketing and equipping aspects of practice will be addressed in seminars, clinical visits, group presentations, case studies, etc. Emphasis will be placed on developing skill in the critical evaluation of business proposals necessary for exemplary practice.

PHT 440F Health Care Delivery System A half-credit course designed to examine the health care delivery system, medico-legal responsibilities, professional ethics, professional organizations, professional development. This is a lecture course.

PHT 444F Literature Review This is a half course designed to provide students with the opportunity to critically review a topic of current interest in physical therapy in order to improve their skills of critical analysis and writing. To complete this course, the student shall select a topic that is relevant to physical therapy and conduct an in-depth, critical review of the literature on this topic. The topic must be approved by the course coordinator. The review and analysis will be presented in written form. Good critical analysis involves clear organization and competent style. Optional seminar topics will include library-searching rehabilitation medicine literature and academic writing skills. Note: Students enrolled in PHT 444F will be required to complete an additional half course. **OR**

PHT 445Y Independent Study is a full course which provides the student an opportunity to pursue a topic of interest and contribute to the knowledge base of physical therapy. The student may (1) conduct limited-scope *original research* on a topic related to physical therapy; or (2) conduct an *instrument development* project. Instrument development includes the development and evaluation of questionnaires, or teaching tools.

Prerequisite: Students must have: (1) completed Year III of the BSc(PT) program **or** have completed Year I of the Program **and** have a previous university degree **and** have completed the requisite number of A&S courses for the BSc(PT) degree; (2) receive approval of the course coordinator and the advisor for the specified topic.

PHT 450A Disordered and Restorative Motor Control is a full course which provides the student with the opportunity to integrate neuroanatomy, neuropathology, neurophysiology, and neurotherapeutics. Emphasis will be on disordered movement and posture. The course consists of lectures, laboratories, seminars and tutorials in the Fall term.

PTI 410B Clinical Practice Students will be required to spend ten weeks full-time in approved Physical Therapy facilities immediately following completion of the academic component of the program's fourth year. Two five-week placements comprise the ten-week block of clinical practice. Satisfactory completion of this clinical practice is required for graduation. This will be arranged by the University Coordinator of Clinical Education.

Arts & Science Courses Two full course equivalents.