Graduate Catalog 2006-2007

Physical Therapy

Major Adviser: Ernest Nalette, Chair of Graduate Studies, enalette@ithaca.edu

The physical therapy department offers a five-year, dual-degree program in clinical science and physical therapy. Students receive a bachelor of science degree in clinical science after four years of study at the Ithaca campus, and a 43.5-credit master of science degree in physical therapy after a year of graduate study at the Rochester campus. Students must complete the graduate year to be eligible for physical therapy licensure. The five-year program is designed for both freshman-entry and transfer applicants. The undergraduate component of the five-year program is described in the Ithaca College undergraduate catalog.

The graduate program builds on the undergraduate program’s depth and breadth in the liberal arts and basic sciences, independent study skills, and understanding of theory, communication, and critical thinking. The graduate program is approximately 12 months in duration and takes place at Ithaca College’s Rochester campus in affiliation with the University of Rochester. Students participate in classroom and clinical experiential learning opportunities on campus and throughout the other diverse clinical and research facilities in the greater Rochester area. Eighteen weeks of full-time clinical affiliation are served in clinics located across the country. In addition, there are elective learning opportunities in biomechanics, coursework, specialized clinical affiliations, and in Ithaca College’s movement analysis laboratory. Interested students should contact the chair of graduate studies in physical therapy as special advanced planning is required to take advantage of this opportunity.

The department also offers a transitional doctorate for those individuals who hold an Ithaca College master’s degree in physical therapy. This is a 12-credit, 10-week, on-site program whose purpose is to augment the student’s education to make it equivalent to the standards set in the entry-level D.P.T.

Admission Requirements

To be eligible for admission to the graduate program, applicants must have completed the Ithaca College B.S. degree program in clinical science and have achieved a cumulative GPA of 3.00 or greater.

Departmental Regulations

Academic Warning

In the event that a student finishes an academic block (12 credits) with a GPA below 3.00; or fails to remove a grade of incomplete (I) in the allotted time; or withdraws from a required course; or fails, drops, or withdraws from a clinical education course, the student will be placed on academic warning by the Division of Graduate Studies. Students may be allowed to progress in the curriculum only under conditions specified and approved by the department. Remediation for removal of academic warning status will be determined by the graduate faculty. Graduate students on academic warning may not be allowed to progress to clinical education courses. Warning will be removed when the student’s GPA for the following block (of 12 or more credits) is 3.00 or greater.

If a student receives a grade of U (unsatisfactory) in a clinical affiliation, he or she will be issued an academic warning by the Division of Graduate Studies. The student must remediate this grade in one or more of the following ways, as recommended by the graduate faculty:
1. Attend an equivalent affiliation and receive a grade of S (satisfactory).
2. Perform remedial work under the supervision of one or more faculty members.

Upon successful remediation, the warning will be removed and the student will be allowed the opportunity to progress in the program.

**Academic Dismissal**

A graduate student in the Department of Physical Therapy can be subject to dismissal for any of the following reasons:

1. Receiving a total of more than 6 credits of C (C-, C, C+) during the graduate year
2. Receiving a grade of F for any course in the graduate year (excluding clinical affiliation)
3. Remaining on academic warning for any two consecutive blocks of 12 or more credits each
4. Failing, dropping, or withdrawing from any two clinical education courses
5. Failing to complete departmental remediation as prescribed by the faculty within the allotted time
6. A pattern of unprofessional conduct

**Housing and Transportation Arrangements for Clinical Affiliations**

During the full-time clinical affiliation, students are responsible for making housing arrangements and transportation to and from clinical facilities.

**Master of Science in Physical Therapy**

**Graduation Requirements**

All required graduate coursework is listed below and must be taken in sequence unless permission to deviate from the sequence or time frame has been approved by the graduate faculty. Candidates for a master’s degree in physical therapy are required to meet all requirements for graduation within three years of their matriculation into the graduate program.

All physical therapy majors must take graduate-level courses offered by the Department of Physical Therapy for a letter grade unless otherwise specified in the course descriptions.

**Curriculum**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PTMS-60100</td>
<td>Pathokinesiology</td>
<td>3</td>
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<tr>
<td>PTMS-60300</td>
<td>Cardiac Testing and Management</td>
<td>2</td>
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<tr>
<td>PTMS-60500</td>
<td>Pulmonary Testing and Management</td>
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<tr>
<td>PTMS-60600</td>
<td>Orthotics and Prosthetics</td>
<td>2</td>
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<td>PTMS-60700/</td>
<td>Research I and II (4)</td>
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<tr>
<td>PTMS-60800</td>
<td><em>or</em></td>
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<tr>
<td>PTMS-63000/</td>
<td>Thesis I and II (4)</td>
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<tr>
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<td>Clinical Education III</td>
<td>3</td>
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<tr>
<td>PTMS-61100/</td>
<td>Clinical Education IV and V (6)</td>
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<tr>
<td>PTMS-61200</td>
<td><em>or</em></td>
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<tr>
<td>PTMS-62100</td>
<td>Clinical Education VI (6)</td>
<td>6</td>
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Doctorate in Physical Therapy (Transition)

Admission Requirements

This program is open only to Ithaca College graduates holding an M.S. in physical therapy. While the program is designed for students who are currently enrolled in the clinical science/physical therapy program (i.e., students to graduate with their M.S. in physical therapy between 2005 and 2011), applicants from the earlier years of the M.S. program (1994-2004) may apply and be admitted on a case-by-case basis.

Graduation Requirements

All required graduate coursework must be taken in sequence unless permission to deviate from the sequence or time frame has been approved by the graduate faculty. Candidates for a doctoral degree in physical therapy must meet all requirements for graduation within three years of their matriculation.

All physical therapy majors must take graduate-level courses offered by the Department of Physical Therapy for a letter grade unless otherwise specified in the course descriptions.

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<td>PDPT-61100</td>
<td>Applications of Evidence-Based Practice in Physical Therapy</td>
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<td>Case Study Seminar</td>
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<tr>
<td>PDPT-61300</td>
<td>Clinical Teaching and Learning: Theory and Practice</td>
<td>1</td>
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<tr>
<td>PDPT-61400</td>
<td>Applications of Wellness and Prevention in Physical Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PDPT-61500</td>
<td>Managerial Applications in Physical Therapy Practice</td>
<td>2</td>
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Physical Therapy Course Descriptions

In the following course descriptions, F=fall, S=spring, SU=summer, and Y=yearly.
PTMS-60000 Clinical Conference II

Preparation for learning in the clinical environment. Students receive instruction on how to determine their own learning style, perform self-evaluation, and incorporate this information into the clinical education objectives. Includes techniques for problem solving, providing and accepting feedback, effective communication skills, and development of professional behaviors. 1 credit. (F, Y)

PTMS-60100 Pathokinesiology

Presents specific pathological conditions (primarily organized according to anatomical regions) that result in disorders of posture, movement, and locomotion. The presentations and analyses of these pathokinesiological conditions include neurological, neuromotor, and musculoskeletal aspects with respect to the causes of dysfunction. Laboratory exercises require the student to use movement analysis equipment to demonstrate pathomechanics and abnormal movement patterns. 3 credits. (F, Y)

PTMS-60300 Cardiac Testing and Management

Review of normal cardiac physiology and the response of this system to exercise and disease. Cardiac pathologies are discussed, including a review of the medical and surgical management of specific disease groups. Evaluation procedures utilized to determine the status of the cardiac system’s performance are studied and performed in the laboratory. Clinical management procedures used by all members of the rehabilitation team are reviewed with emphasis on specific physical therapy procedures. 2 credits. (S, Y)

PTMS-60500 Pulmonary Testing and Management

Review of normal pulmonary physiology and the response of the pulmonary system to exercise and disease. Pulmonary pathologies are discussed, including a review of the medical and surgical management of specific disease groups. Evaluation procedures utilized to determine the status of pulmonary performance are studied and performed in the laboratory. Clinical management procedures used by all members of the rehabilitation team are reviewed with emphasis on specific physical therapy interventions utilized in treating patients with pulmonary disease. 2 credits. (S, Y)

PTMS-60600 Orthotics and Prosthetics

Includes an in-depth review of the principles and practices of orthotics and prosthetics as applied by a physical therapist. This includes a survey of the basic biomechanical principles utilized in applying orthotic and prosthetic appliances, as well as principles of patient application, training, and management of complications. 2 credits. (S, Y)

PTMS-60700 Research I

Principles and methods of scholarly inquiry. Topics include formulation of research problems, literature review, hypothesis testing, techniques of data collection, and analysis of results. Historical and philosophical methods are introduced, but the course focuses on descriptive and experimental methods. 2 credits. (F, Y)

PTMS-60800 Research II

Application of research theory to interpretation, analysis, and synthesis of scientific literature. Through group projects, the student is required to perform literature review and define research methodologies, including sampling, instrumentation, design, analysis of data, and issues concerning reliability and validity. Culminates in a project presentation. Prerequisites: PTMS-60700. 2 credits. (S, Y)
PTMS-61000 Clinical Education III

This is the third placement for a student in a clinical environment. The student is given the opportunity to apply more advanced theories and treatment procedures to a selected patient caseload with guidance from a clinical instructor. Six weeks in length. Prerequisites: Satisfactory completion of all prior required coursework. Graded U/S only. 3 credits. (F, Y)

PTMS-61100, PTMS-61200 Clinical Education IV, V

These are options for the final placements of the student in a clinical environment and together total not less than 12 weeks. Prerequisites: Satisfactory completion of all prior required coursework. Students must register for these courses or PTMS-62100. Graded U/S only. 3 credits each. (SU, Y)

PTMS-61300 Clinical Science I -- Orthopedics

Covers pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of orthopedic disorders. 3 credits. (S, Y)

PTMS-61400 Clinical Science II -- Medicine

Survey of the most common diseases found in the practice of general medicine. Presentations emphasize medical management procedures and include a discussion of physical therapy interventions that may be applied to this varied patient population. 2 credits. (F, Y)

PTMS-61500 Clinical Science III -- Neurology I

Provides foundation for examination, evaluation and interventions for individuals with movement-related impairments, functional limitations, and disabilities resulting from neurologic disease. A systematic clinical decision-making approach is used to integrate finds from a patient’s medical history and reports from other rehabilitation team members with results of standardized neurologic examinations, observation of movement, and analysis of functional tasks. The neurologic diagnosis of stroke and its related movement deficits are covered in detail. 3 credits. (S, Y)

PTMS-61600 Clinical Science IV -- Surgery

Survey of the most common forms of general surgery encountered in the practice of physical therapy. Emphasis is on general surgical techniques including indications, expected outcomes, and complications, as well as the pre- and postoperative role of the physical therapist. An in-depth review of peripheral vascular disease, decubitus ulcer, and burn management is presented. 3 credits. (S, Y)

PTMS-61700 Clinical Science V -- Neurology II

Examination, evaluation, and physical therapy interventions for individuals with progressive and non-progressive neurologic disease resulting from upper and lower motor neuron disorders. A systematic clinical decision-making approach is used to integrate findings from a patient’s medical history and reports from other rehabilitation team members with results of standardized neurologic examinations, observation of movement, and analysis of functional tasks. Prerequisites: PTMS-61500. 4 credits. (S, Y)

PTMS-61800 Clinical Science VI -- Pediatrics
Etiology, pathology, and diagnosis; medical, surgical, and clinical examination and evaluation; and physical therapy management of pediatric disorders of the neuromuscular system. The physiological basis and therapeutic techniques of neurophysiological approaches to intervention are examined. 3 credits. (S, Y)

PTMS-61900 Geriatrics in Physical Therapy

Study of the special needs of the older adult. Preparation to plan physical therapy interventions for the problems of older individuals through consideration of age-related changes, psychosocial characteristics, and the continuum of services available for this population. Adaptations of evaluation and treatment methods for older persons are also discussed. 1 credit. (S, Y)

PTMS-62100 Clinical Education VI

This is one of the final options for placement of the student in a clinical environment. One 12-week session. Prerequisites: Satisfactory completion of all prior coursework. Students must register for this course or PTMS-61100 and PTMS-61200. Graded U/S only. 6 credits. (SU, Y)

PTMS-62200 Pre-Clinical Conference III

Series of sessions to explain the policies and procedures for graduate clinical education and to choose sites for graduate clinical affiliations. Pass/fail only. 0 credits.

PTMS-62400 Professional Development III

Prepares students for their terminal clinical experiences. Students create a professional development plan. Strategies for time management, stress management, and adaptability in the clinical setting are presented. Clinical cases allow the students to explore ethical decision making, patient advocacy, and application of professionalism. 1 credit. (F, Y)

PTMS-62500 Wellness and Prevention

The role of the physical therapist in wellness and prevention for individuals, groups, and communities. The physiological rationale behind designing comprehensive wellness programs is presented. Topics include the development and implementation of general fitness and prevention programs for a variety of clients including those with chronic disabilities. Prerequisites: 671-60300. Corequisites: 671-60500. 1 credit. (S, Y)

PTMS-62600 Professional Development IV

Prepares the student to enter the profession. Topics include current issues in physical therapy, direction of the profession, postgraduate development and specialization, and professional employment skills. Prerequisites: 761-62400; 671-61000. 0.5 credit. (S, Y)

PTMS-63000, PTMS-63100 Thesis I, II

Independent research that is theoretically sound and relevant to furthering the knowledge base of physical therapy. The courses are geared to prepare students to perform independent research or to pursue a doctoral degree. The courses are conducted over the entire year of graduate study (PTMS-63000 in the fall, PTMS-63100 in the spring) and culminate in a written thesis that must be approved by the department and the graduate office. Open only to students with a minimum 3.30 undergraduate GPA who successfully pass a faculty review. Elective. 2 credits each.
**Transitional D.P.T. Course Descriptions**

**PDPT-61000 Clinical Reasoning and Differential Diagnosis in Physical Therapy**

An advanced course focusing on the physical therapist’s role, in collaboration with other health care providers, in medical screening of major organ systems. This course integrates the physical therapy evaluation with the current clinical decision-making algorithms associated with common diseases of major organ systems. Upon completion, the physical therapist is expected to gain confidence in clinical decision making relative to patients with complex multisystem diseases. Prerequisites: Matriculation into transitional D.P.T. program. 2 credits. (F)

**PDPT-61100 Applications of Evidence-Based Practice in Physical Therapy**

An advanced course that requires students to use their knowledge of research design and clinical theory to evaluate the evidence supporting contemporary clinical practice guidelines and specific patient case scenarios. Students will be challenged in classroom activities and via Internet-based assignments to integrate information from a variety of resources to evaluate clinical practice guidelines. Emphasis will be placed on determining which aspects of physical therapist practice are best supported, given current decision-making models, patient values and preferences, and clinical experience. Prerequisites: Matriculation into transitional D.P.T. program. 2 credits. (F)

**PDPT-61200 Case Study Seminar**

Applies the principles of evidence-based practice to selected patient cases across a variety of physical therapy diagnoses from current practice settings. Emphasis will be placed on the complex patient who demonstrates multisystem involvement. The case studies are an intensive investigation designed to analyze and understand medical and/or surgical factors important to the etiology, care, and outcome of the patient’s problems as they relate to the physical therapy plan of care. Included are factors related to cardiovascular, gastrointestinal, endocrine/rheumatological, musculoskeletal, neurologic, genitourinary, pulmonary, psychological, and hemato-oncological problems. Pharmacological issues related to management of multisystem involvement and the interaction of drug therapy with rehabilitation will be addressed. Prerequisites: Matriculation into transitional D.P.T. program. 2 credits. (F)

**PDPT-61300 Clinical Teaching and Learning: Theory and Practice**

Preparation to teach in a variety of settings and formats for academic, clinical, and professional purposes. Content is applicable to community presentations, group in-services/presentations as well as patient/family, student interns, and other individualized teaching. Includes teaching/learning theories and methods; impact of age, culture, environment, and motivation; domains of learning; instructional objectives; teaching methods for cognitive, affective, and psychomotor skills; and instructional technology. Evaluation, feedback, and outcome measurements are included. Prerequisites: Matriculation into transitional D.P.T. program. 1 credit. (F)

**PDPT-61400 Applications of Wellness and Prevention in Physical Therapy**

Explores the role of the physical therapist in wellness and the prevention of common health concerns of individuals, groups, and communities. Develops the expertise of the physical therapist in functioning in this capacity. Discusses the physiological rationale behind designing comprehensive wellness programs. Emphasis on identifying risks, performing screenings, general concepts of program development and assessment, and integration of teaching/learning and motivation strategies. Prerequisites: Matriculation into transitional D.P.T. program. 3 credits. (F)

**PDPT-61500 Managerial Applications in Physical Therapy Practice**
Designed to develop leadership and management skills to become a doctor of physical therapy. Integration of financial, regulatory, management, communication, and marketing principles into physical therapy practice needs. Students will apply learned concepts through the development of communication, negotiation, and networking skills to enhance effectiveness as managers, consultants, and leaders. Prerequisites: Matriculation into transitional D.P.T. program. 2 credits. (F)