cooperative education and clinical experience, PT academic exchange programs, and global service PT programs to Mexico and Ecuador.

**RESEARCH OPPORTUNITIES**

The Department of Physical Therapy, Movement and Rehabilitation Sciences’ research mission is to build the evidence for best practices to maintain and improve the health and well-being of the local, national, and global community members. Students have the opportunity to work with faculty to conduct ongoing research in one of the twelve Department of Physical Therapy, Movement, and Rehabilitation Science's labs and centers; including:

- Neumotor Systems Laboratory
- Laboratory for Locomotion Research
- Cancer Survivorship Center
- The ReGameVR Laboratory
- Movement Neuroscience Laboratory
- Rehabilitation and Epidemiology Trainee Program
- Occupational Biomechanics and Ergonomics Laboratory
- Neuropysiology Laboratory
- Teaching and Learning Innovation Laboratory
- Musculoskeletal Epidemiology and Biomechanics Laboratory
- Cadaver Lab
- Neuroscience Wet Lab

**Programs**

**Doctor of Physical Therapy (DPT)**

- Physical Therapy ([catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/dpt](http://catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/dpt))
- Physical Therapy—Direct Entry ([catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/dpt-direct-entry](http://catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/dpt-direct-entry))
- Transitional Doctor of Physical Therapy ([catalog.northeastern.edu/graduate/professional-studies/doctoral-degree-programs/physical-therapy-dpt](http://catalog.northeastern.edu/graduate/professional-studies/doctoral-degree-programs/physical-therapy-dpt))

**Master of Science (MS)**

- Occupational Ergonomics and Health ([catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/occupational-ergonomics-health-ms](http://catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/occupational-ergonomics-health-ms))

**Graduate Certificate**

- Early Intervention ([catalog.northeastern.edu/graduate/health-sciences/applied-psychology/early-intervention-graduate-certificate](http://catalog.northeastern.edu/graduate/health-sciences/applied-psychology/early-intervention-graduate-certificate))
- Advanced Study in Orthopedic Physical Therapy ([catalog.northeastern.edu/graduate/professional-studies/graduate-certificate-programs/advanced-study-of-orthopedics-graduate-certificate](http://catalog.northeastern.edu/graduate/professional-studies/graduate-certificate-programs/advanced-study-of-orthopedics-graduate-certificate))
- Disability Studies ([catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/disability-studies-graduate-certificate](http://catalog.northeastern.edu/graduate/health-sciences/physical-therapy-movement-rehabilitation/disability-studies-graduate-certificate))
Courses

Physical Therapy Courses

PT 5101. Foundations of Physical Therapy. 3 Hours.
Introduces basic patient-care procedures and professional behaviors used in physical therapy practice. Prepares students for co-op education experiences and discusses implications for career planning. Prereq. Junior, senior, or graduate standing. Coreq. PT 5102.

PT 5102. Lab for PT 5101. 1 Hour.
Accompanies PT 5101. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5101.

PT 5103. Human Skills Development. 2 Hours.
Examines typical skill development and maturation from intrauterine life through old age (senescence). Considers the interaction of system development on acquisition of and changes in skill development. Students apply developmental concepts to case studies and hypothetical clinical situations. Emphasizes childhood and early adult development as a foundation to the changes that occur later in adulthood and senescence. Prereq. Junior, senior, or graduate standing.

PT 5104. Therapeutic Modalities. 1 Hour.
Provides application of physical agents to treat a variety of impairments found during a physical therapy examination. Covers the theory, rationale, and application of thermal, electrical, light, and mechanical agents. Prereq. PT 5131 and junior, senior, or graduate standing. Coreq. PT 5105.

PT 5105. Lab for PT 5104. 1 Hour.
Accompanies PT 5104. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5104.

PT 5111. Professional Development for Bouvé Graduate Co-op. 1 Hour.
Introduces graduate students to the Bouvé Cooperative Education Program and offers an opportunity to develop job-search and career-management skills. Students perform assessments of their workplace skills, interests, and values and discuss how they impact personal career decisions. Offers students an opportunity to prepare a professional-style résumé, learn proper interviewing techniques, and gain an understanding of the opportunities available to them for co-op. Introduces career paths, choices, and career decision making. Seeks to familiarize students with workplace issues relative to their field of study and to teach them to use myNEU COOL database in the job-search and referral process. Presents and discusses co-op policies, procedures, and expectations of the Bouvé Cooperative Education Program and co-op employers. Prereq. Junior, senior, or graduate standing.

PT 5131. Gross Anatomy. 4 Hours.
Covers the structure and function of the human body with particular emphasis on the skeletal, muscular, nervous, and cardiovascular systems and clinical application to these systems. Considers basic abnormalities of structure and function. Involves lectures, cadaver prossection, osteology, and surface anatomy labs. Prereq. (a) BIOL 1119 with a grade of C and junior or senior standing or (b) graduate standing. Prereq. PT 5131.

PT 5132. Lab for PT 5131. 1 Hour.
Accompanies PT 5131. Covers topics from the course through various activities. Prereq. Junior, senior, or graduate standing. Coreq. PT 5131.

PT 5134. Lab for PT 5131. 1 Hour.
Examines typical skill development and maturation from intrauterine life through old age (senescence). Considers the interaction of body-system development on acquisition of and changes in skill development. Students apply developmental concepts to case studies and hypothetical clinical situations. Emphasizes childhood and early adult development as a foundation to the changes that occur later in adulthood and senescence. Prereq. Junior, senior, or graduate standing.

PT 5133. Kinesiology. 3 Hours.
Studies normal movement through the analysis of muscle and joint function. Introduces fundamental examples of pathokinesiology, aberrant motions, and postures. Emphasizes analysis of the major joints and regions of the body as related to the field of physical therapy, including aspects of gait analysis. Encourages critical thinking and integrates material learned in prior course work, including, but not limited to, anatomy and physiology. Prereq. PT 5131 with a grade of C and junior, senior, or graduate standing; physical therapy students only. Coreq. PT 5134.

PT 5135. Introduction to the Healthcare System. 2 Hours.
Introduces students to the healthcare system, including the roles of health professionals, healthcare delivery systems, and the healthcare marketplace. Emphasizes the importance of effective communication and professional behavior in the healthcare setting. Prereq. PT 5131 with a grade of C and junior, senior, or graduate standing. Coreq. PT 5135.

PT 5136. Neuroscience. 4 Hours.
Covers the structure and physiological function of the human nervous system with emphasis on the clinical aspects of motor and somatosensory systems. Studies the anatomy of the brain, brain stem, and spinal cord in specimens and on slides and integrated with the basic physiology of motor and sensory systems. The application of neuroscience to clinical neurological cases is a foundation of this course. Prereq. PT 5131 with a grade of C and junior, senior, or graduate standing. Coreq. PT 5133.

PT 5137. Clinical Neuroscience. 2 Hours.
Examines typical skill development and maturation from intrauterine life through old age (senescence). Considers the interaction of body-system development on acquisition of and changes in skill development. Students apply developmental concepts to case studies and hypothetical clinical situations. Emphasizes childhood and early adult development as a foundation to the changes that occur later in adulthood and senescence. Prereq. Junior, senior, or graduate standing.

PT 5138. Neuroscience. 4 Hours.
Examines factors that influence the learning of new motor skills (motor learning) as a result of practice. Prereq. PT 5133 with a grade of C, PT 5138 with a grade of C (the latter may be taken concurrently), and junior, senior, or graduate standing; physical therapy majors only. Coreq. PT 5151.
PT 5150. 1 Hour.
Offers students an opportunity to apply knowledge gained in PT 5150 to activities designed to illustrate various principles and concepts related to motor control, motor development, and motor learning. Uses a series of guiding questions/activities in each laboratory and analyzes associated literature to offer students an opportunity to apply class concepts to healthy individuals and to those with clinical problems related to motor control, motor development, or motor learning. Coreq. PT 5150.

PT 5160. Psychosocial Aspects of Healthcare. 3 Hours.
Examines interpersonal relationships among patients, families, health professionals, and society, with reference to the impact of and reaction to illness and disability. Identifies personal and societal beliefs, values, and attitudes that affect the role of people with illness or disabilities in our culture and the healthcare system; how patients' beliefs, values, and experiences affect their expectations and interactions with healthcare professionals; and how beliefs, values, and experiences shape professional development and affect relationships with patients. Prereq. (a) PT 5101 with a grade of C (may be taken concurrently by graduate students) and (b) ENGW 1111, ENGW 1102, ENGL 1111, ENGL 1102, or graduate standing; physical therapy majors only with junior, senior, or graduate standing. Coreq. PT 5161.

PT 5161. Psychosocial Aspects of Healthcare Seminar. 1 Hour.
Offers students an opportunity to engage in hands-on service roles and address the needs/interests of community partners. Students also have an opportunity to reflect on their learning through service during on-campus and online activities/assignments. Coreq. PT 5160.

PT 5165. Sports Medicine: Managing the Injured Athlete. 4 Hours.
Offers students an opportunity to obtain in-depth knowledge in sports medicine. Covers tapering and bracing procedures and techniques to assess concussions with various current protocols. Exposes students to current common pathologies within the athletic population. Discusses return-to-play criteria for an athlete once an injury has occurred and has subsequently been treated and rehabilitated. Prereq. PT 5505 with a grade of C.

PT 5170. Motor Control. 3 Hours.
Focuses on the theories and models of neuromuscular control and learning of human movement. Examines the relationship between theory and practice and how motor function may be altered by a variety of factors. Prereq. PT 5133 and junior, senior, or graduate standing. Coreq. PT 5171.

PT 5171. Lab for PT 5170. 1 Hour.
Accompanies PT 5170. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5170.

PT 5172. Recitation for PT 5170. 0 Hours.
Provides small-group discussion format to cover material in PT 5170. Prereq. Junior or senior standing.

PT 5209. Neurological Rehabilitation 1. 4 Hours.
Covers the foundations of the physical therapy examination, evaluation, and intervention with patients with neurological deficits. Presents examination skills, theoretical bases, and clinical applications of integrated intervention approaches for the patient with a neurological diagnosis. Includes the etiology, pathology, and physical therapy management of common neurological disorders affecting the pediatric population. Prereq. PT 5515 with a grade of C, PT 5540 with a grade of C, and junior, senior, or graduate standing. Coreq. PT 5210.

PT 5210. Lab for PT 5209. 1 Hour.
Accompanies PT 5209. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5209.

PT 5226. Physical Therapy Professional Seminar 2. 2 Hours.
Continues PT 5135 and builds on concepts introduced in the earlier course. Affords students the opportunity to reflect on issues in experiential education and prepare for future experiential learning. Prereq. PT 6000 with a grade of C and junior, senior, or graduate standing.

PT 5227. Physical Therapy Project 1. 3 Hours.
Provides students with the opportunity to conduct an independent project under the mentorship of physical therapy faculty in areas such as research, education, clinical practice, administration, or service learning. Prereq. PT 5515 with a grade of C, PT 5540 with a grade of C, PT 6243 with a grade of C, and junior, senior, or graduate standing.

PT 5229. Physical Therapy Project 2. 2 Hours.
Provides students with a continued opportunity to work with individual faculty on scholarship activities to create a scholarly work in partial fulfillment of the requirement for a Doctor of Physical Therapy degree. Allows students to continue the research or education project that was initiated in PT 5227. Guides students as necessary to enable them to complete their capstone project. Prereq. PT 5227 with a grade of C and junior, senior, or graduate standing.

PT 5230. Pediatric and Geriatric Aspects of Life Span Management. 3 Hours.
Incorporates analysis and comparison of methods of physical therapy (PT) management of selected populations across the life span, which includes pediatrics and geriatrics. Focuses on utilizing evidenced-based rationale for clinical decision making within the context of PT examination, evaluation, PT diagnosis, prognosis, and plan of care. Discusses how patient/client management seeks to reflect core professional values, as well as topics of prevention and wellness in these patient populations. Prereq. PT 5209 with a grade of C, PT 5505 with a grade of C, PT 6241 with a grade of C, and senior or graduate standing; DPT students only.

PT 5351. Physical Therapy Business Management. 2 Hours.
Introduces students to the strategy and business-planning principles, tools, and resources related to developing a new business, service, or product relevant to the physical therapy profession. The goal is for students to develop a business, implementation, and a marketing plan. Covers issues related to business, finance, law, regulations, licensure, real estate, and marketing. Prereq. PT 6219 and junior, senior, or graduate standing; physical therapy majors only.

PT 5410. Functional Human Neuroanatomy. 4 Hours.
Examines the detailed structure of the human nervous system, linking structure to function at both the clinical and neurobiological level. Offers students an opportunity to obtain a solid functional anatomical foundation for neuroscience. Reviews basic neuroanatomy and then provides a detailed look into the structure of the nuclei within the central nervous system and their connectivity. Examines the role of these structures in motor and sensory function as well as in complex cognitive functions at a physiological and clinical level. Prereq. (a) BIOL 1103, BIOL 1113, BIOL 1117, BIOL 2297, BIOL 2299, BIOL 3405, or graduate standing and (b) PSYC 3458 or graduate standing; junior, senior, or graduate standing. Coreq. PT 5411.

PT 5411. Lab for PT 5410. 1 Hour.
Examines the detailed structure of the human nervous system in specimens of the human brain and spinal cord as well as in images of stained sections of these tissues and magnetic resonance images (MRI). The structure of individual nuclei and the main sensory and motor tracts of the nervous system are examined and discussed by students working in small groups. Although focusing on anatomical details, the lab introduces the student to clinical diagnosis of neurological cases. Coreq. PT 5410.
PT 5500. Pharmacology for Physical Therapy. 4 Hours.
Offers a clinically oriented course covering knowledge of clinical pharmacology in the physical therapy profession. Discusses prescription and over-the-counter drugs and common herbal supplements. Drug classification, pharmacokinetics, pharmacodynamics, mechanism of action, drug interactions, and common side effects are brought into the clinical perspective of patient management. Explores recognition of expected drug effects, side effects, idiosyncratic reactions, and signs of abuse or nonadherence. Emphasizes the therapist's proper incorporation of pharmacotherapeutic knowledge into patient assessment, differential diagnosis, and design of treatment regimens. Prereq. PT 5140 and senior or graduate standing; physical therapy students only.

PT 5503. Cardiovascular and Pulmonary Management. 4 Hours.
Discusses physical therapy examination evaluation, interventions, and outcome assessment of common cardiac and pulmonary dysfunctions. Discusses etiology and pathology of common cardiac and pulmonary disorders. Uses case-based learning to promote synthesis of the material. Prereq. PT 5133 with a grade of C, PT 5140 with a grade of C, and junior, senior, or graduate standing. Coreq. PT 5504.

PT 5504. Lab for PT 5503. 1 Hour.
Accompanies PT 5503. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5503.

PT 5505. Musculoskeletal Management 1. 4 Hours.
Discusses physical therapy examination evaluation, interventions, and outcome assessment of common musculoskeletal dysfunctions. Uses case-based learning to promote synthesis of the material. Prereq. PT 5515 with a grade of C, PT 5540 with a grade of C, and junior, senior, or graduate standing. Coreq. PT 5506.

PT 5506. Lab for PT 5505. 1 Hour.
Accompanies PT 5505. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5505.

PT 5515. Integumentary Systems and Advanced Modalities. 2 Hours.
Applies anatomy, physiology, epidemiology, and pathology to explore the issues of medical, surgical, pharmacological, and psychological and physical therapy management of individuals throughout the life span with integumentary system impairments. Provides students with the opportunity to develop examination skills to derive diagnoses, prognoses, evaluations, and effective physical therapy interventions based on relevant evidence. Builds on information from PT 5104 to include electrophysiological testing and interpretation. Uses case studies to integrate the information learned in class. Prereq. PT 5150 with a grade of C, PT 5500 with a grade of C, PT 5503 with a grade of C, and junior, senior, or graduate standing. Coreq. PT 5516.

PT 5516. Lab for PT 5515. 1 Hour.
Accompanies PT 5515. Covers topics from the course through various experiments. Prereq. Junior, senior, or graduate standing. Coreq. PT 5515.

PT 5520. Clinical Integration 1: Evidence and Practice. 2 Hours.
Prepares physical therapy students to safely manage patients in all inpatient settings, such as the acute and critical care settings and the acute rehabilitation and skilled nursing home settings. Focuses on integrative analysis of multiple disease processes (spanning all practice patterns of musculoskeletal, neuromuscular, cardiovascular, pulmonary, and integumentary) and their respective medical and surgical management that is relevant to physical therapy management encountered in these settings. Helps to enhance the student's understanding of the scientific basis of physical therapy through a review of current scientific research, thereby helping the student to develop a foundation for evidence-based practice in these inpatient settings. Prereq. Junior, senior, or graduate standing. Coreq. PT 5521.

PT 5521. Case Studies for PT 5520. 1 Hour.
Discusses case studies relevant to the topics of PT 5520. Prereq. Junior, senior, or graduate standing. Coreq. PT 5520.

PT 5540. Clinical Integration 1: Evidence and Practice. 2 Hours.
Designed to prepare physical therapy students to integrate previous courses taught in the curriculum to safely manage patients in the acute-care setting, including the intensive-care unit, the critical-care unit, and step-down settings. Uses a combination of lecture, instruction in the simulation center, and standardized patient interactions. Follows the "Guide to Physical Therapy Practice for Evaluation and Intervention" in these settings. Offers students an opportunity to learn to perform an examination; to evaluate examination data to formulate a plan of care; to provide interventions; to determine a discharge plan for individuals in the acute-care environment; and to demonstrate core professional values in classroom, recitation, and standardized patient interactions. Prereq. PT 5150 with a grade of C, PT 5500 with a grade of C, PT 5503 with a grade of C, and junior, senior, or graduate standing; physical therapy students only.

PT 5560. Ergonomics and the Work Environment. 3 Hours.
Builds upon the public health definition that ergonomics is the applied science that optimizes overall human-systems performance and well-being within the work environment. Emphasizes a public health approach suited for healthcare professionals building on their strengths and training in analytical diagnostic skills and interventions, ranging from primary to tertiary approaches. Covers topics including epidemiology, job hazard analysis, and intervention methods and research. Offers students an opportunity to obtain the knowledge and skills to improve the physical ergonomic factors in a workplace in order to increase the health and well-being of workers. Prereq. Senior or graduate standing.

PT 5601. Project for PT 5600. 1 Hour.
Focuses on a project to accompany PT 5600. Prereq. Senior or graduate standing.

PT 5610. Workplace Wellness and Health Promotion. 3 Hours.
Focuses on the skills needed to create, implement, and evaluate workplace health promotion and injury prevention programs. Studies the National Institute of Occupational Safety and Health's (NIOSH) essential elements of workplace health programs, utilizing and reviewing the literature in support of these essential elements throughout the semester. Workplace factors have strong associations with the health and health behaviors of workers. Builds upon basic wellness and organizational ergonomic principles to offer students an opportunity to develop the skills needed and to obtain the knowledge of the work environment and health promotion. Prereq. Senior or graduate standing.

PT 5710. Psychosocial Aspects of Disability. 4 Hours.
Explores the psychological, social, and cultural factors that underlie responses and adaptations to chronic illness and disability by individuals and families. Offers a foundation for nonjudgmentally ascertaining and supporting clients’ needs. Includes coping needs and strategies that are used by those without complicating factors, as well as those that may be used by individuals who have comorbid conditions such as psychiatric disorders; substance abuse; or cultural, gender, or age differences. Presents best practices on interviewing skills, assessment, and interventions to support the needs of people affected by chronic illness or disability. Prereq. Junior, senior, or graduate standing.
PT 5720. Legal and Policy Issues Surrounding Disability. 4 Hours.
Offers an interprofessional course addressing the issues of disability relative to the law, public policy, rights, and advocacy. Often there is a discrepancy between the level of funding supplied to people with disabilities (PWD) and the actual costs of caring for these individuals in order to maximize their independence. The laws and policies that currently exist are often complex and lead to varied interpretations and applications, leaving some PWD without access to services to which they are entitled. This course offers students an opportunity to gain a broad understanding of the complex, dynamic, legal, and policy issues concerning PWD. In addition, this course explores access to available resources and legal limits of service delivery systems. Prereq. Junior, senior, or graduate standing.

PT 5730. Global Perspectives in Disability and Health. 4 Hours.
Addresses the issues of disability relative to culture, public policy, rights, and advocacy. People with disabilities are less likely to receive necessary healthcare and rehabilitation services and as a consequence experience poorer health outcomes and mortality. Explores the effects of cultural beliefs, social attitudes, and stigma toward people with disabilities. Evaluates the impact of poverty, sociopolitical conditions, health economics, and resource allocation issues. Analyzes charitable contributions, by human rights and other organizations, to the needs of people with disabilities in underserved areas to identify both desirable and undesirable impacts. This interprofessional course offers students an opportunity to gain a broad understanding of complex and dynamic issues concerning people with disabilities in underserved and globally diverse settings. Prereq. Junior, senior, or graduate standing.

PT 5740. Disabilities Practicum. 4 Hours.
Offers students an opportunity to work with a public agency, volunteer group, school system, parent collaborative, charitable organization, or other group that provides services for adults and/or children with disabilities. Designed to provide experiential learning while working with individuals or groups who have unmet needs in achieving their mission or objectives. The student, practicum coordinator, and a site supervisor develop a contract detailing the expected outcome(s) to be achieved. Examples include developing a new policy, performing a needs assessment, performing a literature search, writing a position paper addressing an important question, developing a training manual, or developing an advocacy plan. Requires working a minimum of sixty hours. Prereq. (a) PT 5710, PT 5720, or HLTH 5280 and (b) junior, senior, or graduate standing.

PT 5776. Directed Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. Prereq. Junior, or graduate standing.

PT 5778. Independent Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. Prereq. Junior, or graduate standing.

PT 6000. Leadership, Administration, and Management. 2 Hours.
Offers students an opportunity to develop the ability to analyze and evaluate changes in the healthcare system, health policy, and the impact on the delivery of services with a focus on physical therapy. Appraises key business and management concepts, including personnel, insurance, finance, marketing, productivity, and financial and legal regulations within the context of ethical practice. Emphasizes and examines leadership concepts in the areas of advocacy, legislation, and the promotion of the profession. Prereq. PT 5145 with a grade of C, PT 6243 with a grade of C, and senior or graduate standing; physical therapy students only.

PT 6215. Assistive Technology. 3 Hours.
Studies theory and current practice in the use of prosthetics, orthotics, and assisted-living devices. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, PT 6223 with a grade of C, and senior or graduate standing; physical therapy students only. Coreq. PT 6216.

PT 6216. Lab for PT 6215. 1 Hour.
Accompanies PT 6215. Covers topics from the course through various experiments. Prereq. Senior or graduate standing; physical therapy students only. Coreq. PT 6215.

PT 6219. Physical Therapy Administration. 4 Hours.
Explores concepts in administration and management applied to physical therapy. Involves seminar and discussion groups. Prereq. Senior or graduate standing.

PT 6221. Neurological Rehabilitation 2. 4 Hours.
Focuses on the physical therapy management of adults with neurological dysfunctions. Concentrates on management of functional activity limitations, participation restrictions, and impairments resulting from neurological disease and/or trauma. Offers students an opportunity to learn about the etiology, pathology, clinical signs, and medical management of adults with neurological disorders; to learn to perform an examination, evaluate the examination data to formulate a plan of care, and provide interventions; and to use evidence-based decision making. Prereq. PT 5209 with a grade of C and PT 6241 with a grade of C. Coreq. PT 6222.

PT 6222. Lab for PT 6221. 1 Hour.
Accompanies PT 6221. Covers topics from the course through various experiments. Coreq. PT 6221.

PT 6223. Musculoskeletal Management 2. 4 Hours.
Provides an in-depth analysis of musculoskeletal management. Compares intervention protocols as an integral component of this course. Allows, in the lab component, for practical application of spinal joint mobilization, modalities, ergonomic assessment, functional training, and therapeutic exercise. Uses case-based learning to promote synthesis of the material. Prereq. PT 5505 with a grade of C and PT 6241 with a grade of C and senior or graduate standing; physical therapy students only. Coreq. PT 6224.

PT 6224. Lab for PT 6223. 1 Hour.
Accompanies PT 6223. Covers topics from the course through various experiments. Coreq. PT 6223.

PT 6231. Advanced Physical Therapy Topics in Pediatrics. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in pediatrics and physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5230 with a grade of C and senior or graduate standing.

PT 6232. Advanced Physical Therapy Topics in Spine. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in spine and physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 6223 with a grade of C.

PT 6233. Advanced Physical Therapy Topics in Orthopedics. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in orthopedics and physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5505 with a grade of C and senior or graduate standing.
PT 6234. Advanced Physical Therapy Topics in Alternative Medicine. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in alternative medicine and physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, and PT 6223 with a grade of C.

PT 6235. Advanced Physical Therapy Topics in Geriatrics. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in geriatrics and physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, and PT 6223 with a grade of C; physical therapy majors only.

PT 6236. Advanced Physical Therapy Topics in Cardiovascular/ Pulmonary. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in cardiovascular/pulmonary physical therapy. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, PT 6223 with a grade of C, and senior or graduate standing.

PT 6237. Advanced Special Topics in Physical Therapy. 2 Hours.
Provides students with an opportunity to obtain in-depth knowledge in a specific physical therapy topic area. Course topics vary each semester offered. Topics are determined by significant events and changes in the field. This course may be taken more than once, as long as topics are different. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, PT 6223 with a grade of C, and senior or graduate standing.

PT 6239. Intercultural Healthcare Delivery Systems—Physical Therapy. 4 Hours.
Engages students with the culture, civilization, and people of the countries studied and visited. Seeks to provide students with an in-depth and on-site experience, exposing them to the history, anthropology, philosophy, culture, and arts with a special focus on the healthcare system in the country of study. Encourages students to connect with their peers in each country/society and gain a “global experience” designed to enhance their academic studies on campus in Boston. The experience culminates in an independent service project conducted by the students before, during, and after their time in-country.

PT 6240. Differential Diagnosis in Physical Therapy. 3 Hours.
Teaches physical therapy students how to conduct comprehensive physical therapy evaluations on a variety of patient populations across the life span, in order to determine the need for further medical consultation and/or to develop an accurate physical therapy diagnosis. Emphasizes developing efficiency through skillful sequencing of examination techniques along with providing rationale during the diagnostic process. Prereq. PT 6221 and senior or graduate standing.

PT 6241. Screening for Medical Conditions in Physical Therapy Practice. 4 Hours.
Designed to prepare physical therapy students to recognize the signs and symptoms of medical conditions and adverse drug reactions as they relate to patient examination and to triage appropriately. Emphasizes screening for medical conditions with the goal of recognizing red, yellow, and green flags as they relate to patient care. Stresses medical referral to other healthcare practitioners in an efficient and effective manner. Prereq. PT 5515 with a grade of C, PT 5540 with a grade of C, and senior or graduate standing; physical therapy students only.

PT 6243. Health Education, Promotion, and Wellness. 3 Hours.
Covers health promotion, wellness, disease, impairment, functional limitations, disability, and health risks. Offers students an opportunity to explore their consultative role to business, schools, government agencies, and other organizations. Prereq. (a) HLTH 5450 with a grade of C and PT 5160 with a grade of C or (b) graduate standing; physical therapy majors with senior or graduate standing. Coreq. PT 6244.

PT 6244. Recitation for PT 6243. 0 Hours.
Provides small-group discussion format to cover material in PT 6243. Coreq. PT 6243.

PT 6250. Clinical Integration 2: Evidence and Practice. 2 Hours.
Offers students an opportunity to practice demonstrating core professional values in classroom, recitation, and standardized patient interactions and to learn how to skilfully manage complex patients across the life span and across practice patterns in a variety of clinical settings. Integrates evidence-based content from previous courses in the curriculum. Introduces special topics in physical therapy, including bariatric care, home care, and hospice. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, and PT 6223 with a grade of C; physical therapy students only.

PT 6251. Diagnostic Imaging. 3 Hours.
Designed to integrate diagnostic imaging principles and techniques relevant to physical therapy practice. Reviews commonly used diagnostic imaging techniques and discusses clinical case studies in a case-based online course. Prereq. PT 6215 with a grade of C and PT 6250 with a grade of C.

PT 6441. Clinical Education 1. 6 Hours.
Provides students with opportunities to practice examination, evaluation, and intervention skills previously learned in the classroom and on co-op. Students work under the supervision and guidance of a licensed physical therapist. Prereq. PT 5230 with a grade of C, PT 6221 with a grade of C, PT 6223 with a grade of C, and senior or graduate standing.

PT 6442. Clinical Education 2. 6 Hours.
Continues PT 6441. Provides students with additional opportunities to practice examination, evaluation, and intervention skills learned in the classroom and during the previous course. Students are expected to function at a higher level requiring less supervision and guidance from a licensed physical therapist than was needed during their first clinical education experience. Prereq. PT 6441.

PT 6448. Clinical Education 3. 9 Hours.
Designed to provide students with the opportunity to meet entry-level requirements to practice as physical therapists. Supervised and guided by a licensed physical therapist, students practice examination, evaluation, intervention, documentation, and administrative skills and are expected to function at the level of a new graduate by the completion of this experience. Includes a written assignment. Helps students, through reflection of what they have learned, identify who they are as professionals, establish early career goals, and provide insight for the need to be a lifelong learner. Prereq. PT 6442.

PT 6962. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions.

PT 6964. Co-op Work Experience. 0 Hours.
Provides eligible students with an opportunity for work experience.

PT 6966. Practicum. 1-4 Hours.
Provides eligible students with an opportunity for practical experience.

PT 6978. Independent Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor.