

# PHYSICAL THERAPY (PT)

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## **PT 5410. Human Anatomy Trunk and Upper Extremity. (4 Credits)**

Discussion of the conceptual and structural basis of osteology, myology, neurology, human development, and basic kinesiology and biomechanics. Selected anatomical and physiological dysfunctions of the trunk and upper extremity will also be discussed.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205410>)

## **PT 5412. Human Anatomy Pelvis and Lower Extremity. (4 Credits)**

Discussion of the conceptual and structural bases of osteology, myology, neurology, human development, and basic kinesiology and biomechanics. Selected anatomical and physiological dysfunctions of the pelvis and lower extremity will also be discussed.

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## **PT 5414. Clinical Human Physiology. (3 Credits)**

Discussion of the biochemical, nutritional, cellular and physiological principles necessary for the analysis of the normal and abnormal function and for the rehabilitation of the human musculoskeletal, cardiovascular and respiratory systems using patient cases.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205414>)

## **PT 5416. Clinical Neuroscience. (5 Credits)**

Introduction to foundational concepts and vocabulary of neuroanatomy, neurophysiology, and the basic mechanisms of neuropathology, with emphasis on the specific pathologies they are likely to encounter in physical therapist practice. The course will provide an overview of the medical and surgical diagnosis and management of patients with neurologic pathology. Impact of neuromuscular pathology across the lifespan and implications for physical therapy management are introduced.

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## **PT 5418. Clinical Pharmacology. (3 Credits)**

Integrates and summarizes the essentials of medical pharmacology. The main molecular and cellular actions of drugs will be emphasized as well as the principles governing the use and actions of drugs in the treatment of disease.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205418>)

## **PT 5420. Foundation in Clinical Pathology. (3 Credits)**

A comprehensive presentation of the general principles of disease with an emphasis on general pathology. Focus is on the mechanisms underlying disease and their management as a basis for therapeutic program planning in physical therapy.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205420>)

## **PT 5422. Cardiopulmonary Pathology. (2 Credits)**

A comprehensive presentation of cardiopulmonary diseases. Focus is on the mechanisms underlying disease and their management as a basis for therapeutic program planning in physical therapy.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205422>)

## **PT 5424. Musculoskeletal Pathology. (4 Credits)**

Mechanical properties of musculoskeletal tissues will be described. Growth and maintenance mechanisms of the different tissues will be detailed. Diseases and disorders of the musculoskeletal system will be covered. The underlying tissue pathology and clinical symptoms will be addressed from the orthopedic and physical therapy perspective. Therapeutic interventions will be presented.

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## **PT 5430. Functional-Biomechanical Relationships. (3 Credits)**

Students will receive detailed descriptions and analyses of structures of the musculoskeletal system in general as well as within individual functional regions. Students will also examine how structure affects function within each region. Lastly, they will also examine the forces sustained by the various regions during function, in normal and pathological conditions thus preparing them to apply knowledge of normal anatomical structure and function to therapeutic intervention.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205430>)

## **PT 5431. Prevention, Health Promotion, Fitness and Wellness. (2 Credits)**

Prepares the student to provide culturally competent evidence based physical therapy services for prevention, health promotion, fitness and wellness to individuals, groups, and communities.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205431>)

## **PT 5432. Motor Control and its Clinical Application. (4 Credits)**

Introduction to and discussion of contemporary theories of motor control, research evidence on normal, abnormal, developmental, and aging-related processes governing motor control will be provided. These ideas will be applied to understand the various impairments of neurological populations and their treatment using the model of evidence based practice.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205432>)

## **PT 5433. Management for the Physical Therapist. (3 Credits)**

Introduction to the student to the field of disability studies. Physical, cognitive, emotional, social, and cultural factors related to the presence of disability and chronic illness throughout the life span will be explored. Emphasis is placed on those aspects of disability that affect the practice of physical therapy assessment and treatment.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205433>)

## **PT 5434. Foundations for System Review. (2 Credits)**

A foundations course for Physical Therapy Majors in Differential Diagnosis. The course scope covers a broad spectrum of clinical sciences and provides training in screening (i.e. history taking) of a culturally diverse patient/client population across the lifespan for appropriate healthcare management.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205434>)

**PT 5437. Education and Communication for Physical Therapists. (3 Credits)**

Fundamental aspects of education and communication as they relate to physical therapy as described in the Guide to Physical Therapist Introduction to learning theories and theories of change. Learner assessment and strategies for communication and instruction will be covered. Students generate written and oral communications and will plan and deliver an educational unit relating to physical therapy. View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205437>)

**PT 5438. Professionalism for the Physical Therapist. (2 Credits)**

Through readings, lecture, personal investigation, and discussion of current issues, "hot topics" and problems in the profession of physical therapy, students will demonstrate an understanding of their environment of practice. Students learn selected laws, rules, regulations, guidelines and ethical codes governing the practice of physical therapy and will explore possible solutions to common professional problems. Emphasis is placed on the importance of ethical and legal practice. View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205438>)

**PT 5440. Evidence-Based Practice in Physical Therapy. (3 Credits)**

A foundations course in research, statistical analyses, and evidence-based clinical-decision for Physical Therapy students. Students will develop skills for conducting literature searches, critically appraising clinical research and developing research questions. Applications will fall within the Physical Therapy Profession Patient/Client Management Model.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205440>)

**PT 5446. Evidence-Based Practice Seminar. (2 Credits)**

Focuses on clinical research related to diagnosis, and prevention / treatment outcomes with emphasis on musculoskeletal and neuromuscular physical therapy. Students will participate in meetings and discussions to facilitate their research projects.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205446>)

**PT 5448. Capstone Scholarly Report Preparation. (2 Credits)**

Students in the Doctor of Physical Therapy program are required to participate in a scholarly project (original research, systematic review or clinical case report) with one or more faculty mentors and students. Course requirements are met by the preparation of a manuscript meeting professional standards for form and content, culminating in a document appropriate for submission to a refereed journal.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205448>)

**PT 5450. Fundamentals of Physical Therapy Examination. (5 Credits)**

Covers the fundamentals of physical therapist examination in the context of overall practice as described in the Guide to Physical Therapist Practice. Students will be introduced to basic tests and measures as well as to information relevant to their selection and interpretation. Students will apply the tests in laboratory and clinical settings and will learn to appropriately document their findings.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205450>)

**PT 5451. Acute Care Management. (5 Credits)**

An exploration of the practice of Physical Therapists in the acute care setting. Students will develop competency in clinical evaluation of impairments and functional limitations, identification of appropriate intervention options, and implementation of a plan of care to improve performance of functional activities for patients commonly encountered in acute care practice settings. This course encourages problem solving and critical thinking through the integration of knowledge and skills in the laboratory and clinic and through a written assignment and presentation. View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205451>)

**PT 5452. Therapeutic Interventions I. (2 Credits)**

An exploration of interventions commonly used by physical therapists in both inpatient and outpatient settings. Students will develop competency in selection and implementation of therapeutic exercise as an intervention to improve performance of functional activities for patients commonly encountered in a variety of settings. Assessment of therapeutic effects and modification of the interventions is an integral component.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205452>)

**PT 5453. Musculoskeletal Rehabilitation - The Spine. (3 Credits)**

Management of musculoskeletal conditions affecting the spine. Elements of patient management consist of examination, evaluation, diagnosis, prognosis, and intervention with attention to outcomes, differential diagnosis, and screening strategies. Evidence-based practice is reinforced. Applications will consider client populations across the life span.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205453>)

**PT 5454. Musculoskeletal Rehabilitation - The Extremities. (3 Credits)**

Management of musculoskeletal conditions affecting the extremities. Elements of patient management consist of examination, evaluation, diagnosis, prognosis, and intervention with attention to outcomes, differential diagnosis, and screening strategies. Evidence-based practice is reinforced. Applications will consider client populations across the life span.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205454>)

**PT 5455. Essentials of Rehabilitation Practice. (3 Credits)**

An exploration of the practice of Physical Therapists in the area of orthotics prosthetics, Diabetes and Spinal Cord Injury. Students will develop competency in clinical assessment of functional limitations, specifically in locomotion, identification of appropriate treatment options and implementation of interventions, through the use of orthotics and prosthetics, to improve performance of functional activities for patients with a variety of deficits.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205455>)

**PT 5456. Neuromuscular Rehabilitation. (4 Credits)**

Through comprehensive problem solving, students will learn to manage adult patients with neuromuscular dysfunction. Students will develop neurophysiologically sound examination and inter-vention skills integrating physical and psychological patient considerations. The skill set for examination and treatment will be consistent with foundational movement science under the evidenced based practice model.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205456>)

**PT 5458. Pediatric Physical Therapy. (2 Credits)**

Covers normal motor development, childhood conditions that are commonly served by pediatric physical therapists, and general examination and intervention methods used for pediatric populations. View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205458>)

**PT 5460. Introduction to Clinical Education. (1 Credit)**

Provides students with a foundation for clinical experiences and provide simulated hands-on practice in doing tests and measures used in physical therapy and in nursing. Concepts of expert practice, experiential learning, collaborative learning are explored. Interprofessional learning will be emphasized through work with nursing students. Students will develop an understanding of the importance of experiential learning, professional behaviors, self-evaluation and personal reflection. Students will work collaboratively with nursing students in a simulation lab while developing an understanding of interprofessional patient care. View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205460>)

**PT 5461. Clinical Education I. (8 Credits)**

Under close supervision by a licensed Physical Therapist, students will participate as a member of the health care team to provide patient care in an inpatient or outpatient setting for 10 weeks. Patient care settings may include but are not limited to Acute Care, Orthopedics, Neuro-Rehabilitation or specialties including but not limited to pediatrics, oncology, or women's health. The course is held off campus at individually assigned clinical facilities throughout the country. Each student is assigned one or two clinical instructors who are physically present and immediately available for direction and supervision.

**Enrollment Requirements:** Students must be in good academic standing and be granted department consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205461>)

**PT 5463. Integrated Clinical Experience, Musculoskeletal. (2 Credits)**

Clinical experience that provides students the opportunity to integrate interventions learned in PT 5453 and 5454 in an outpatient setting. Students will utilize examination and manual therapy skills in the development and implementation of plans of care for outpatients with various musculoskeletal conditions.

**Enrollment Requirements:** Open to students in good standing enrolled in the Doctor of Physical Therapy program; all previous D.P.T program courses must have been passed.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205463>)

**PT 5464. Clinical Education II. (8 Credits)**

Under close supervision by a licensed Physical Therapist, students will participate as a member of the health care team to provide patient care in an inpatient or outpatient setting for 10 weeks. Patient care settings may include but are not limited to Acute Care, Orthopedics, Neuro-Rehabilitation or specialties including but not limited to pediatrics, oncology, or women's health. The course is held off campus at individually assigned clinical facilities throughout the country. Each student is assigned one or two clinical instructors who are physically present and immediately available for direction and supervision.

**Enrollment Requirements:** Students must be in good academic standing and be granted department consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205464>)

**PT 5465. Public Engagement in Prevention, Health Promotion, Fitness and Wellness. (1 Credit)**

Provides experiences for students in the development and delivery of service related to prevention, health promotion, fitness, and wellness in settings that support supervised interaction with the surrounding community.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205465>)

**PT 5466. Integrated Clinical Experience, Neuromuscular. (2 Credits)**

A clinical experience that provides students the opportunity to integrate interventions learned in PT 5455 and PT 5456 in a clinical setting. Students will utilize examination and intervention skills in the development and implementation of plans of care for patients with various neuromuscular conditions.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205466>)

**PT 5467. Clinical Education III. (8 Credits)**

Under close supervision by a licensed Physical Therapist, students will participate as a member of the health care team to provide patient care in an inpatient or outpatient setting for 12 weeks. Patient care settings may include but are not limited to Acute Care, Orthopedics, Neuro-Rehabilitation or specialties including but not limited to pediatrics, oncology, or women's health. The course is held off campus at individually assigned clinical facilities throughout the country. Each student is assigned one or two clinical instructors who are physically present and immediately available for direction and supervision.

**Enrollment Requirements:** Students must be in good academic standing and be granted department consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205467>)

**PT 5469. Integrated Clinical Experience, Acute Care. (1 Credit)**

Provides students with clinical experience at hospitals and sub-acute health care facilities. Students will observe and will assist as appropriate with patient care under the supervision and direction of a licensed physical therapist. The course allows students to integrate and apply the didactic component of the curriculum in an acute or sub-acute environment. It is designed to foster the student's appreciation for the multidisciplinary nature of hospital care.

**Enrollment Requirements:** Students must be in good academic standing and be granted department consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205469>)

**PT 5471. Manual Therapy in the Management of Musculoskeletal Disorders. (3 Credits)**

Focuses on the manual therapy examination and treatment of patients with musculoskeletal conditions. Instruction will be primarily case based and integrate various manual therapy approaches across body regions. Concepts introduced in the PT 5453 and 5454 courses will be explored in greater depth with a focus on improved proficiency in delivery of soft tissue and joint manipulation techniques including thrust. Evidence-based practice will be reinforced. Applications will consider diverse patient/client populations across the life span.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205471>)

**PT 5472. Advanced Pediatric Physical Therapy. (3 Credits)**

An elective for Doctorate of Physical Therapy students that covers the specialized practice of pediatric physical therapy. The course provides in depth information about pediatric conditions for which physical therapy services are typically provided. Specialized pediatric assessments and interventions are reviewed and clinical opportunities are provided to integrate and apply the academic information.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205472>)

**PT 5473. Geriatric Physical Therapy. (3 Credits)**

An elective course for Doctorate of Physical Therapy students that covers the specialized practice of geriatric physical therapy. Provides in depth information about geriatric conditions for which physical therapy services are typically provided. Examines normal and pathological aging, and analyzes the evidence behind specialized geriatric assessments and interventions. Clinical opportunities will be included to integrate and apply the academic information.

**Enrollment Requirements:** Open only to students in the Physical Therapy Program.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205473>)

**PT 5474. Leadership and Action for Health Professionals. (3 Credits)**

The development of leadership skills through foundational readings, self-reflection, collaboration with peers and faculty, and project development with external entities to promote the health of society. Explores opportunities for professional engagement in advocacy efforts at the local, state and national level.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205474>)

**PT 5480. Interaction for Health Care and Society. (3 Credits)**

Introduction to health care systems. Interactions between government agencies, institutions, communities and individuals addressed in relation to planning, funding, and delivering healthcare. Particular focus placed on societal issues relating to underrepresented groups including persons with disabilities (PWD), with an emphasis on those aspects that affect the practice of physical therapy assessment and treatment.

**Enrollment Requirements:** Open to students enrolled in the D.P.T. program and others with departmental consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205480>)

**PT 5481. Therapeutic Interventions II. (2 Credits)**

An exploration of interventions commonly used by physical therapists in both inpatient and outpatient settings. Students will develop competency in selection and implementation of therapeutic exercise and physical agents as interventions to improve performance of functional activities for patients commonly encountered in a variety of settings. The assessment of therapeutic effects and modification of the interventions is an integral component of this course.

**Enrollment Requirements:** PT 5452; open only to PT students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=PT%205481>)