

PHYSICAL THERAPY (PT)

PT 503L. Physical Therapy Process I Lab. 2 Credits.

This course introduces students to the theory and practice of foundational physical therapy skills, such as body mechanics, basic handling skills, measurement of vital signs, goniometry and muscle testing of the upper extremity, and therapeutic exercise. Students are introduced to appropriate use of medical terminology and abbreviations, patient communication skills and documentation of objective assessment findings.

Prerequisites: None

Offered: Every year, Fall

PT 504L. Physical Therapy Process II Lab. 4 Credits.

This course utilizes the Physical Therapist Patient/Client Management Model to build upon and integrate assessment skills developed in Physical Therapy Process I. Assessment techniques including neurologic examination, goniometry and manual muscle testing of the spine and the lower extremities are covered. Physical Therapy interventions including functional mobility training and therapeutic exercise prescription focusing on the lower extremities and complex multi-joint activities are introduced.

Prerequisites: None

Offered: Every year, Spring

PT 505. Kinesiology I. 2 Credits.

This course introduces the basic principles of human movement. Forces and torques in static clinical free body diagrams are studied. Numerous problem-solving processes and skills are developed throughout the semester. The student learns to identify different muscle interactions and combinations. Students also study movement and movement patterns of the upper extremity, using an EMG recording system.

Prerequisites: None

Offered: Every year, Fall

PT 505L. Kinesiology I Lab. 1 Credit.

Lab to accompany PT 505.

Prerequisites: None

Offered: Every year, Fall

PT 507. Kinesiology II. 2 Credits.

Kinesiology II introduces the foundational principles of biomechanics with special emphasis on applications to the lower extremities. The course emphasizes joint structure and function of the lower extremity as well as the spine. Forces and torques in static clinical free body diagrams are expanded and dynamic motion is studied. Students utilize hands-on techniques to enhance understanding of muscle function and joint mechanics.

Corequisites: Take PT 507L.

Offered: Every year, Spring

PT 507L. Kinesiology II Lab. 1 Credit.

Lab to accompany PT 507.

Corequisites: Take PT 507.

Offered: Every year, Spring

PT 509. Clinical Decision Making I. 2 Credits.

This course is designed to integrate information from previous academic and clinical experiences. The APTA model of physical therapist practice, evidence informed practice, and the ICF model provide foundational frameworks to guide clinical decision making. An interactive, case-based approach is used to develop problem solving, and reinforce the principles of documentation.

Prerequisites: None

Offered: Every year, Spring

PT 512. Human Anatomy I. 3 Credits.

This course presents the anatomical structures of the upper extremity, back, head and neck through lecture and human donor dissection experiences. Students analyze the relationship between structures, function and application to human movement. Clinical correlations between anatomy and pathology provide a foundation for clinical decision making. This course emphasizes collaboration in an active learning environment.

Prerequisites: None

Offered: Every year, Fall

PT 512L. Human Anatomy Lab. 1 Credit.

Lab to accompany PT 512.

Prerequisites: None

Offered: Every year, Fall

PT 513. Human Anatomy II. 2 Credits.

This course presents the anatomical structures of the lower extremity, thorax, abdomen and pelvis through lecture and human donor dissection experiences. Students analyze the relationship between structures, function, and application to human movement. Clinical correlations between anatomy and pathology provide a foundation for clinical decision making. This course emphasizes collaboration in an active learning environment.

Prerequisites: Take PT 512.

Offered: Every year, Spring

PT 513L. Human Anatomy II Lab. 1 Credit.

Lab to accompany PT 513.

Prerequisites: None

Offered: Every year, Spring

PT 516. Clinical Decision Making II. 1 Credit.

This case-based course provides students with an opportunity to integrate information from previous academic and clinical experiences. Using the ICF model, students reflect on in-class cases, standardized patient experiences and integrated clinical experiences to reinforce integration of multiple systems in a patient/client management model. These experiences and a cumulative practical assist students as they prepare for their first full-time clinical experience.

Prerequisites: None

Offered: Every year, Summer

PT 517. Clinical Education Seminar. 1 Credit.

This course provides essential information for physical therapist students to enter full-time clinical experiences. The course informs students about compliance mandates for the clinical setting, expectations for service at the clinical site, and communication strategies and expectations for clinical performance in the context of patient centered care. Students are provided with strategies to enable them to succeed in their clinical experiences.

Prerequisites: None

Offered: Every year, Summer

- PT 518. Functional Neuroanatomy.** **3 Credits.**
 This course presents the gross and developmental anatomy of the central nervous system, including major structures, landmarks and pathways. Normal motor control and postural control mechanisms are also explored. Emphasis is placed on the function of these structures with cases planned to illustrate the functional outcomes of pathology in these structures.
Prerequisites: None
Offered: Every year, Fall
- PT 519. Professional Issues in Physical Therapy I.** **2 Credits.**
 This course introduces the learner to the evolution of the physical therapy profession. Students examine the roles and responsibilities of the physical therapist through exploration of the APTA core values and code of ethics, standards of practice, advocacy, and interprofessional collaboration. Students discuss health disparity and social determinants of health, and begin to explore cultural competence and cultural humility.
Prerequisites: None
Offered: Every year, Fall
- PT 520. Pathophysiology I.** **3 Credits.**
 This course integrates material taught in the foundational courses with disease-specific content regarding the cardiovascular, pulmonary, gastrointestinal, hematological, hepatic and endocrine systems. Active learning strategies help students interpret relationships between pathophysiology and clinical presentation to make safe and effective clinical decisions within physical therapy examination and intervention strategies.
Prerequisites: None
Offered: Every year, Summer
- PT 523. Applied Pharmacology I.** **1 Credit.**
 This course enables students to identify and discuss the impact of drug therapy on patients receiving physical therapy. Students integrate this information into patient/client management. Specifically, students look at medications utilized for cardiovascular, pulmonary disease processes and pain management.
Prerequisites: None
Offered: Every year, Summer Online
- PT 528. Musculoskeletal I.** **3 Credits.**
 This course emphasizes integration of skills learned during foundational courses in the assessment and treatment of musculoskeletal diagnoses. The student will develop and utilize an evidence-informed approach to examine, evaluate and establish a plan of care for patients with various musculoskeletal conditions of the cervical spine and upper quadrant.
Prerequisites: None
Offered: Every year, Spring
- PT 528L. Musculoskeletal I Lab.** **1 Credit.**
 Lab to accompany PT 528.
Corequisites: Take PT 528.
Offered: Every year, Spring
- PT 529. Musculoskeletal II.** **3 Credits.**
 This course continues to emphasize integration of skills learned during foundational courses in the assessment and treatment of musculoskeletal diagnoses. The student will develop and utilize an evidence-informed approach to examine, evaluate and establish a plan of care for patients with various musculoskeletal conditions of the lumbar spine and lower quadrant.
Prerequisites: None
Offered: Every year, Summer
- PT 529L. Musculoskeletal II Lab.** **1 Credit.**
 Lab to accompany PT 529.
Corequisites: Take PT 529.
Offered: Every year, Summer
- PT 531. Acute Care and Cardiopulmonary Physical Therapy I.** **3 Credits.**
 This course provides the student with the foundational knowledge required for the management of patients with acute medical conditions with an emphasis on pulmonary, cardiac and vascular pathologies. Integrating information from anatomy, physiology and pathology, students learn to examine and evaluate patients in the acute care setting, document findings, design a plan of care and provide intervention.
Prerequisites: None
Offered: Every year, Summer
- PT 531L. Acute Care Cardiopulmonary Lab I.** **1 Credit.**
 Lab to accompany PT 531.
Corequisites: Take PT 531.
Offered: Every year, Summer
- PT 548L. Physical Agents Lab.** **1 Credit.**
 This course provides students with the foundational knowledge and skills to utilize therapeutic physical modalities of superficial and deep heat, cold, electrotherapy, electromagnetic, mechanical, and light energies to complement other therapeutic interventions to optimize patient outcomes. Case vignettes are utilized to facilitate problem-solving, and integration of theory and evidence.
Prerequisites: None
Offered: Every year, Spring
- PT 569. Education/Community Health/Wellness.** **2 Credits.**
 This course provides the students with the foundational knowledge of wellness, disease prevention and health promotion within a community setting. Students develop an appreciation for person-centered approaches to behavioral change and patient/client education. Health literacy and health promotion program development are explored, especially as they relate to physical therapy practice.
Prerequisites: None
Offered: Every year, Fall
- PT 599. Independent Study.** **1-3 Credits.**
Prerequisites: None
Offered: As needed
- PT 626. Pathophysiology II.** **3 Credits.**
 This course builds on information taught in the foundational sciences and is designed to provide the physical therapy student with detailed information regarding the pathologies of the central nervous system and musculoskeletal systems. The course provides the basis for interpreting abnormalities and the impact to physical therapy. The students build a qualitative and quantitative understanding of the diseases and their effects on physical therapist examination and intervention strategies.
Prerequisites: None
Offered: Every year, Spring
- PT 627. Applied Pharmacology II.** **0-1 Credits.**
 This course is a continuation of Pharmacology I to introduce the physical therapist student to the chemical agents that many patients are taking. This course allows the student to understand how drug therapy can affect patients receiving physical therapy and how physical therapy intervention strategies may need to be modified. Specific medications utilized in the treatment of cancer, neurologic conditions, endocrine dysfunction, antimicrobials and role of CAMs are covered.
Prerequisites: None
Offered: Every year, Spring Online

- PT 628. Acute Care and Cardiopulmonary II.** **2 Credits.**
 This course integrates and builds upon knowledge acquired in the foundational curriculum to examine, evaluate and treat patients with cardiovascular, pulmonary, and integumentary dysfunction across the lifespan. Students prioritize examinations, select evidence-based interventions, manage lines and equipment, monitor hemodynamics and demonstrate competency in making clinical decisions for more complex patients. Students explore the impact of critical illness, systemic disease and interprofessional collaboration on patient outcomes.
Prerequisites: None
Offered: Every year, Spring
- PT 628L. Acute Care and Cardiopulmonary II Lab.** **1 Credit.**
 Lab to accompany PT 628.
Prerequisites: None
Offered: Every year, Spring
- PT 652. Professional Issues in Physical Therapy II.** **1 Credit.**
 In this course, students explore and analyze current areas of growth and vision for the physical therapy profession. Students grow their knowledge of professional advocacy and explore the legislative process within the APTA. Students evaluate health equity and health disparities in relation to social determinants of health and examine a physical therapist's role in population health.
Prerequisites: None
Offered: Every year, Summer
- PT 653. Neurorehabilitation I.** **3 Credits.**
 This course presents a framework for integrating the assessment and treatment techniques appropriate for adults with various neurological conditions. Students learn assessment procedures based on evaluation of normal movement, abnormal movement and function. The course includes laboratory instruction where students develop comprehensive examination techniques, plan and prioritize appropriate goals and interventions, and hypothesize outcomes through case-based modeling and integrated clinical experiences.
Corequisites: Take PT 653L.
Offered: Every year, Spring
- PT 653L. Neurorehabilitation I Lab.** **1 Credit.**
 Lab to accompany PT 653.
Corequisites: Take PT 653.
Offered: Every year, Spring
- PT 654. Neurorehabilitation II.** **3 Credits.**
 This course is designed as a continuation of Neurorehabilitation I. Lecture and lab topics include continued framework development of evaluation and innovative treatment approaches for adults with various neurological conditions. Students are required to integrate and synthesize knowledge gained from current and previous coursework. During the lecture and lab, students continue to develop complex comprehensive evaluation techniques, plan appropriate treatments, and hypothesize outcomes through case-based modeling and integrated clinical experiences.
Corequisites: Take PT 654L.
Offered: Every year, Summer
- PT 654L. Neurorehabilitation II Lab.** **1 Credit.**
 Lab to accompany PT 654.
Corequisites: Take PT 654.
Offered: Every year, Summer
- PT 657. Imaging for Physical Therapists.** **2 Credits.**
 This course introduces the student to imaging principles and techniques as applied to musculoskeletal, neurologic and cardiovascular and pulmonary systems. The integration of imaging in terms of examination, evaluation and patient management is explored within the scope of practice. The course emphasizes radiographic anatomy, common normal variants and some pathological and traumatic conditions. In addition to standard radiographic techniques, other imaging and special techniques are discussed.
Prerequisites: None
Offered: Every year, Fall
- PT 658. Differential Diagnosis.** **3 Credits.**
 This course integrates clinical experience with systems-based knowledge (musculoskeletal, cardiopulmonary, and neurologic) to develop a more complex framework for clinical decision making. Students develop methods of identifying signs and symptoms of diseases and differentiating patient presentations to render examination and referral judgments. Throughout the course, the student engages in clinical and didactic self-reflection to monitor and evaluate judgements based on patient interview and objective examination.
Prerequisites: None
Offered: Every year, Spring
- PT 661. Administration and Leadership in Physical Therapy.** **3 Credits.**
 This course provides students with the theory, skills, and applications for physical therapy administration including reimbursement models and documentation requirements in various practice settings across the United States healthcare delivery system. Students explore leadership roles and responsibilities and the consultative model of physical therapy. A case-based model is utilized to facilitate problem-solving and synthesize knowledge to address contemporary healthcare issues.
Prerequisites: None
Offered: Every year, Summer
- PT 666. Capstone I.** **2 Credits.**
 This is the first in a 3-course series culminating in an original project to be disseminated to peers, faculty, and clinical/community partners. Students work in small groups under the supervision of a capstone project capstone advisor in an area of Clinical Outcomes, Scholarship of Teaching and Learning, or Community, Health, & Social Responsibility. Students apply foundational information about the scientific process to identify the purpose and methods of the project and write a justification including review of the literature.
Prerequisites: None
Offered: Every year, Spring
- PT 668. Psychosocial Aspects of Physical Disability.** **2 Credits.**
 This course presents students with the knowledge of psychosocial dimensions that influence recovery from a physical disability. Stages of adaptation, loss and grief, motivation, confidence, and motivational interviewing techniques are explored to provide person-centered interventions for positive patient outcomes. A case-based model is used to facilitate problem solving and synthesis knowledge of psychological disorders and mental health issues in order to modify a plan of care.
Prerequisites: None
Offered: Every year, Summer

- PT 671. Clinical Education Experience I. 4 Credits.**
 This clinical experience is designed to facilitate the development of skill in the examination, evaluation and treatment of inpatients or outpatients with a variety of musculoskeletal and/or general medical/surgical diagnoses. Students are expected to demonstrate appropriate professional behaviors and develop effective communication skills with patients/clients, families/caregivers, and health care professionals. Prerequisites include successful completion of 3 semesters of academic coursework. HIPAA and OSHA training and CPR certification are required.
Prerequisites: None
Offered: Every year, Fall
- PT 675. Normal/Abnormal Gait. 1 Credit.**
 This online course provides an overview of normal gait with an emphasis on kinematic and kinetic analysis of the gait cycle. Gait analysis techniques including motion analysis, dynamic electromyography, force plate recordings, and measurement of stride characteristics are presented. Physical therapy treatment approaches for patients with abnormal gait are introduced.
Prerequisites: None
Offered: Every year, Summer
- PT 676. Capstone II. 1 Credit.**
 This is the second in a 3-course series culminating in an original project to be disseminated to peers, faculty, and clinical/community partners. Students work in small groups under the supervision of a capstone project capstone advisor in an area of Clinical Outcomes, Scholarship of Teaching and Learning, or Community, Health, & Social Responsibility. Students apply the scientific process to implement the project, modify the project as necessary, and plan for dissemination of the outcome.
Prerequisites: None
Offered: Every year, Summer
- PT 679. Clinical Decision Making III. 2 Credits.**
 This case-based course provides students an opportunity to synthesize and integrate information from courses completed thus far in the DPT curriculum. Students reflect on in-class cases, as well as previous clinical experiences, to examine patient-centered care within the context of different health conditions and varied personal, environmental and participation factors.
Prerequisites: Successful completion of all previously sequenced coursework.
Offered: Every year, Summer
- PT 685. Evidence in Practice. 2 Credits.**
 This course provides students with the foundational skills and knowledge needed to interpret, appraise, and integrate various types of primary and secondary research to inform physical therapy practice. Through completion of online modules, assignments, and discussion, students apply this information to make evidence-informed decisions to impact patient care.
Prerequisites: None
Offered: Every year, Fall
- PT 730. Musculoskeletal III. 2 Credits.**
 This course is designed as a continuation of musculoskeletal I and II. Lecture and lab topics include continued framework development of evaluation and contemporary treatment approaches including thrust manipulation for clients with various musculoskeletal conditions. Students are required to integrate and synthesize knowledge gained from current and previous coursework. During the lecture and lab, students continue to develop comprehensive examination techniques, implement appropriate interventions, and hypothesize outcomes through case-based modeling.
Prerequisites: None
Offered: Every year, Fall
- PT 730L. Musculoskeletal III Lab. 1 Credit.**
 Lab to accompany PT 730.
Prerequisites: None
Offered: Every year, Fall
- PT 736. Pediatric Rehabilitation. 3 Credits.**
 This course presents information needed for the physical therapy student to complete a thorough examination and evaluation of a child with neurological and/or orthopedic diagnoses. Upon completion of the examination, students are able to generate an accurate diagnosis, prognosis and an appropriate plan of care for these patients. Relevant theory and practical learning experiences are provided for the student to develop the knowledge and skills necessary for applying an evidence-based physical therapy intervention strategy for the physical therapy plan of care.
Prerequisites: None
Offered: Every year, Fall
- PT 736L. Pediatric Rehabilitation Lab. 1 Credit.**
 Lab to accompany PT 736.
Prerequisites: None
Offered: Every year, Fall
- PT 744. Physical Therapy Skills Elective. 2 Credits.**
 This course is a required therapy skills course in which students choose topics focusing on specific areas of concentration or advanced skill. All sections of the course use the essential elements of PT practice as an organizing framework and incorporate the review and practical application of recent literature. Students take two sections of electives.
Prerequisites: None
Offered: Every year, Fall
- PT 767. Capstone III. 2 Credits.**
 This is the third in a 3-course series culminating in an original project to be disseminated to peers, faculty, and clinical/community partners. Students work in small groups under the supervision of a capstone project capstone advisor in an area of Clinical Outcomes, Scholarship of Teaching and Learning, or Community, Health, & Social Responsibility. Students apply the scientific process to complete project and disseminate the outcome through a presentation and a written report.
Prerequisites: None
Offered: Every year, Fall

PT 769. Advanced Clinical Decision Making. 2 Credits.

This course features problem-based learning activities and education theories to assist students in continuing to refine and employ their cognitive framework for Physical Therapy practice. The class includes integration and synthesis of client information from all areas of PT practice. Students analyze their clinical decision making within the context of case-based problem solving, evidence informed practice, and formulation of client-centered plans of care along the continuum of care.

Prerequisites: Successful completion of all previously sequenced coursework.

Offered: Every year, Fall

PT 781. Clinical Education Experience II. 6 Credits.

This clinical experience is designed to facilitate the development of skill in the evaluation and treatment of inpatients or outpatients with a variety of musculoskeletal, neuromuscular, and/or general medical/surgical diagnoses. Students are expected to demonstrate appropriate professional behaviors and develop effective communication skills with patients and health care professionals. Course Prerequisites include successful completion of all academic coursework and PT 671: Clinical Education Experience I. HIPAA and OSHA training and CPR certification are required.

Prerequisites: None

Offered: Every year, Spring

PT 782. Clinical Education Experience III. 6 Credits.

This clinical experience is designed to facilitate the development of skill in the evaluation and treatment of inpatients or outpatients with a variety of musculoskeletal, neuromuscular, and/or general medical/surgical diagnoses. Students are expected to demonstrate appropriate professional behaviors and develop effective communication skills with patients and health care professionals. Course Prerequisites include successful completion of all academic coursework, PT 671: Clinical Education Experience I, and PT 781: Clinical Education Experience II. HIPAA and OSHA training and CPR certification are required.

Prerequisites: None

Offered: Every year, Summer