

PT-Physical Therapy

PT 700. Human Gross Anatomy. 3 Hours.

A study of the anatomical structure of the human body includes limbs, back, abdominal wall and cavity. Specific emphasis includes regional study of the relationships between musculoskeletal, nervous, and vascular systems, joint structure, cardiovascular and pulmonary systems, and surveys of selected viscera. Includes surface anatomy.

PT 701. Human Gross Anatomy II. 2 Hours.

A study of the anatomical structure of the human body includes limbs, back, abdominal wall and cavity. Specific emphasis includes regional study of the relationships between musculoskeletal, nervous, and vascular systems, joint structure, cardiovascular and pulmonary systems, and surveys of selected viscera.

Prerequisites: PT 700 [Min Grade: C]

PT 702. Functional Anatomy. 4 Hours.

Integrated study of anatomy, kinesiology, muscle biology, and biomechanics to develop an understanding of and ability to analyze normal and pathologic human movement. Includes palpation and surface anatomy.

PT 704. Analysis of Human Movement. 3 Hours.

Study of human movement through an examination of the movement patterns during common motor skills (eg: walking). The kinematics and kinetics related to movement will be studied across the lifespan.

PT 706. Neuroscience I. 3 Hours.

A study of structures and functions of the human nervous system with emphasis on sensory/motor function.

PT 707. Neuroscience II. 3 Hours.

Study of the theories of motor control and motor learning will serve as a foundation for the understanding how the CNS is organized in relation to human movement.

PT 710. Physical Therapy Intervention I. 3 Hours.

Introduction to the basic components of physical therapy practice applicable to those with acute and chronic conditions. Emphasis placed on basic procedural interventions and equipment.

PT 711. PT Examination I. 2 Hours.

Introduction to the physical therapy examination process. Emphasis on exploring the human movement system as the foundation of patient/client management.

PT 712. Physical Therapy Examination II. 3 Hours.

Continuation of Physical Therapy I with focus on knowledge and skills needed to test and measure strength, range of motion, and posture.

PT 714. Physical Therapy Intervention II. 3 Hours.

Procedures and techniques for the design and implementation of fundamental therapeutic exercise; recognizing impairments in body function and structure and activity limitations amenable to physical therapy; students will utilize therapeutic exercise interventions for prevention and rehabilitation of movement dysfunction and disability.

PT 715. Physical Therapy Intervention III. 3 Hours.

The study and use of knowledge and skills needed to select and use both electrodiagnostic and electrotherapeutic modality interventions for various impairments and functional limitations. Emphasis will be placed on integrating electrical evaluation, electrical and deep heat therapy with previously learned examination, evaluation, and intervention skills. An overview of integument system repair and the management of chronic wounds will be discussed with an emphasis on examination, clinical decision making, and intervention.

PT 716. Clinical Evaluation in Physical Therapy. 3 Hours.

Study of comprehensive clinical evaluation concepts through use of the International Classification of Function, Disability and Health (ICF) model framework with application in health conditions across the lifespan.

PT 720. Pathology and Pharmacology for Movement Disorders I. 3 Hours.

Overview of clinical medicine related to management of movement disorders. Basic principles of pathology and pharmacology. Explores physical therapy implications associated with medical and surgical management of disorders with emphasis on clinical manifestations, management, and physical therapy implications.

PT 721. Pathology and Pharmacology for Movement Disorders II. 3 Hours.

Exploration of medical and surgical disorders with emphasis on clinical manifestations, management, and physical therapy implications.

PT 730. Essentials of Human Physiology. 3 Hours.

Fundamental principles and concepts of human physiology are covered regarding cell physiology, the cardiovascular, endocrine, gastrointestinal, pulmonary, renal, and skeletal muscle systems as well as thermo-regulation of the body. Both cellular and systemic issues are addressed with an emphasis on a mechanistic and integrative approach to understanding function.

PT 731. Human Performance Physiology. 3 Hours.

Course provides fundamental knowledge about the adaptability of human physiological systems in meeting a range of exercise demands. Areas covered include energy transfer during rest and exercise, physiologic and performance adaptations, exercise prescription for healthy adults, and body composition. Research evidence regarding how exercise and physical activity impact health, wellness, and disease is included.

PT 740. PT Management of Musculoskeletal Dysfunction I. 5 Hours.

Application of biological and physical sciences in understanding musculoskeletal disorders. Diagnosis of common musculoskeletal dysfunctions; clinical decision making concerning treatment and prevention of musculoskeletal disorders. Medical and surgical diagnostic and treatment procedures with implications for rehabilitation. Focus for one course is on the lower quarter and the thoracic spine; focus of the other course is on the upper quarter.

PT 741. PT Management of Musculoskeletal Dysfunction II. 5 Hours.

Application of biological and physical sciences in understanding musculoskeletal disorders. Diagnosis of common musculoskeletal dysfunctions; clinical decision making concerning treatment and prevention of musculoskeletal disorders. Medical and surgical diagnostic and treatment procedures with implications for rehabilitation. Focus for one course is on the lower quarter and the thoracic spine; focus of the other course is on the upper quarter.

PT 743. PT Management of Cardiopulmonary Dysfunction. 4 Hours.

Physical therapy examination, evaluation, diagnosis, prognosis, and intervention for patients with primary and secondary disorders involving the cardiovascular/pulmonary system.

PT 750. Physical Therapy Management of Adults with Neuromuscular Dysfunction I. 3 Hours.

Application, analysis, and synthesis of principles of neurophysiologic rehabilitation in physical therapy examination, evaluation, diagnosis, prognosis, and intervention.

PT 751. Physical Therapy Management of Adults with Neuromuscular Dysfunction II. 2 Hours.

Application, analysis, and synthesis of principles of neurophysiologic rehabilitation in physical therapy examination, evaluation, diagnosis, prognosis, and intervention.

PT 752. Physical Therapy Management of Pediatric Conditions. 3 Hours.

Managing pediatric conditions throughout the lifespan. Emphasis will be placed on examination, evaluation, diagnosis, prognosis, interventions, and outcomes.

PT 760. PT Professional Practice I. 2 Hours.

Introduction to the profession of physical therapy, including history, APTA, and scope of practice. Introduction to legal, ethical and other regulatory mechanisms that guide the practice of physical therapy. Presentation of cultural diversity issues related to physical therapy practice.

PT 761. PT Professional Practice II. 3 Hours.

Synthesis and application of regulatory mechanisms, legal mandates and ethical principles and theories to issues facing the physical therapy student and the physical therapist functioning in a multifaceted role; values clarification and decision making related to current professional issues. Strategies for dealing with diverse cultures and conflict. Utilization of documentation strategies to promote effective physical therapy practice and payment.

PT 762. PT Professional Practice III. 3 Hours.

Forces contributing to the health care environment and the effects of this environment on physical therapy practice, research and education. Concepts of health promotion (including wellness and patient education) and the role of the physical therapist in promoting healthy lifestyles in the health care and community settings. Theoretical basis for health behaviors and application of theories to physical therapy practice. Concepts of consultation, program planning, implementation, and evaluation applied to health promotion-oriented physical therapy programs.

PT 763. PT Professional Practice IV. 2 Hours.

Study of management and supervisory principles and current issues related to physical therapy practice: Practical concepts of marketing, organizational structure, fiscal management, facility planning, design and entrepreneurship.

PT 764. Professional Practice V - Capstone Experience. 2 Hours.

Integration of all previous coursework applied to reflection of the scope of physical therapy practice: direct patient care, professional growth/development, professional issues, education, consultation, evidence based practice (EBP), communication and cultural competency. Development and presentation of an individual portfolio that reflects core values, personal and professional growth and accomplishments, and appropriate plans for future professional development.

PT 770. Clinical Education. 1-9 Hour.

Supervised clinical education in patient care skills and practice issues related to physical therapy.

PT 778. Special Topics in Physical Therapy. 1-9 Hour.

Exploration of current issues in Physical Therapy.

PT 790. Scientific Inquiry I. 1-2 Hour.

Introduction to sources of evidence; measurement principles, experimental design, and basic statistical concepts are combined to build analytical skills required for evidence-based practice.

PT 791. Scientific Inquiry II. 2 Hours.

This course combines concepts of measurement principles, experimental design, qualitative, survey outcomes research and a review of basic statistical concepts that will prepare the graduate to critically analyze and use the scientific literature to improve clinical practice. Emphases will be placed on understanding the components of a research report and the concepts associated with judging quality of research design as applied to clinical practice.

PT 798. Doctoral Level Non-Thesis Research. 1-9 Hour.

Implementation of project activities with data collection, analysis, and preparation of manuscript of scholarly activity project. Student and mentor work together to identify specific project components to be completed during each specific term the course is taken.