Course Descriptions - Effective Fall, 2024

PT 701 Clinical Anatomy – 6 hours, 4 credits

This course is an in-depth study of the human body, with emphasis on the neuromuscular and musculoskeletal systems. Structural interrelationships shall be examined as the basis for normal functions and a means to understand structural and functional dysfunctions. Clinical correlates to physical therapy are examined.

PT 702 Medical Terminology – Online, 1 credit

This programmed computerized self-study will provide students with the ability to analyze medical terms, define basic terms and abbreviations used in documenting health records and identify common terms related to diagnosis, therapies, and diagnostic tests.

PT 703 Foundations of Physical Therapy Care – 4 hours, 2 credits

This course serves as an introduction to the physical therapy profession and includes the history and scope of physical therapy practice. Fundamental physical therapy handling skills and massage techniques are introduced and practiced by the students. Documentation of physical therapy services is introduced.

PT 704 Ethical & Psychosocial Dimensions of Physical Therapy – 3 hours, 3 credits

This course examines the multifaceted role of the physical therapist in the health care delivery system. Introduces student to education theory and methodology and professionalism. Communication skills, written and oral, are reviewed and examined. Topics include Code of Ethics, Guide for Practice, direct access and reimbursement. Students are introduced to the purpose and process for evidenced-base practice.

PT 706 Kinesiology – 4 hours, 3 credits

The structure and function of joints and muscles will be reviewed for the upper extremities, head/neck, lower extremities and trunk. Kinesiology terminology, biomechanics, and motion analysis of upper extremities, head/neck, lower extremities, and trunk during functional activities will be presented.

PT 707 Research Design and Methods – 3 hours, 3 credits

Introduction to the scientific methods of inquiry, approaches to data analysis, types of experimental designs and their application to physical therapy research and practice.

PT 708 Human & Exercise Physiology – 4 hours, 4 credits

This course is designed to instruct students on events at molecular, subcellular, and cellular levels, which determine the activities of tissues, organs, and body systems under normal resting conditions and during exercise

PT 709 Physical Modalities – 4 hours, 3 credits

Principles and practical application of thermal, mechanical, electromagnetic and other energies in physical therapy is presented. This course is an introduction and comprehensive review of

the physical modalities that are commonly employed in the physical therapy clinic for evaluation and treatment of various physical dysfunctions.

PT 711 Introduction to the Movement System – 1 hour, 1 credit

This course serves as an introduction to the movement system as it pertains to physical therapy practice. It will introduce the International Classification of Functioning, Disability and Health (ICF), the Patient Management Model, and the task-oriented approach, forming the basis for all examination and intervention courses. Concepts and practice of task analysis will be integrated across the course.

PT 724 Motor Control & Learning – 1 hour, 1 credit

This course covers motor learning and motor control theoretical concepts, synthesized from the collection of current research findings. The clinical application of motor learning and motor control concepts is discussed in the context of the three main elements of the movement system: postural control, mobility, and upper extremity function as these will serve as the basis for the examination and intervention courses to follow. The relevance and applications of the content to clinical practice in a variety of settings is discussed.

PT 740 Therapeutic Interventions & Exercises – 5 hours, 3 credits

Basic concepts of mobility, ROM, and stretching techniques. Application of therapeutic exercise to a broad population of clients from acute care to sports rehabilitation are discussed and practiced, including prevention and restoration of function. Therapeutic application of basic neurophysiological principles associated with strengthening are also presented and practiced.

PT 751 Neuroscience for Physical Therapy – 3 hours, 3 credits

This course provides an overview of microscopic, gross, and developmental anatomy of the human nervous system with emphasis on neurological process, structural and functional relationships. A local progression of information from molecular and cellular levels, to systems and regions provides framework for students to understand neural organization.

PT 752 Physical Therapy Examination – 4 hours, 2 credits

This course is designed to have students understand and competently administer tests and measures that are commonly used in the screening, examination, and evaluation of individuals receiving physical therapy care. Examination of the major systems of the body and functional screening will be emphasized.

PT 755 Introduction to Clinical Education – 2 hours, 1 credit

This course is designed to introduce the student to the principles and theories of educational strategies. The student will apply education concepts to the various roles physical therapists serve when educating clients, families, caregivers, healthcare team members and when delivering formal presentations. This course also prepares the student for their first clinical experience.

PT 770 Evidence-Based Practice in Physical Therapy – 3 hours, 1 credit

To provide students with basic patterns of research from review of the literature to the design of an appropriate research project in the clinical physical therapy environment.

PT 780 Clinical Medicine for Physical Therapy – 3 hours, 3 credits

This course provides an overview of disease and injury with an emphasis on conditions encountered in physical therapy. Student understanding of altered structural and physiological processes and how they apply to physical therapy assessment and treatment are expectations of this course.

PT 790 Pulmonary Examination & Intervention – 3 hours, 2 credits

This course is designed to promote clinical reasoning skills in the examination, assessment, and intervention of patients with pulmonary dysfunctions. Issues related to pulmonary dysfunction will be explored in a laboratory format.

PT 796 Clinical Medicine for Neurological Physical Therapy – 2 hours, 2 credits

This course examines and reviews specific pathology to the central and peripheral nervous system that is commonly seen by physical therapists. The mechanisms of pathology, clinical manifestations, medical management, and implications for PT intervention will be investigated. Diagnoses, prognosis, and signs and symptoms for specific diseases and conditions will be presented. Differential diagnosis of various central nervous system and peripheral nervous system disorders will be discussed.

PT 803 Musculoskeletal Diagnosis I – 3 hours, 1 credit

This course is designed to promote a clinical understanding of lower extremity musculoskeletal and rheumatological diseases and conditions as they related to physical therapy examination and intervention. Issues related to orthopedic dysfunction will be explored in a laboratory format.

PT 804 Neurological Examination & Intervention I – 6.5 hours, 2 credits

This is the first of a three-course series on the examination, evaluation, intervention, plan of care and outcome measures for the adult neurological patient. Courses will be taught within the context of the ICF-model and the APTA's Guide to Physical Therapist Practice. This course series will be presented from a motor control and learning perspective by addressing the three main elements of the movement system: postural control, mobility and upper extremity function. This course will present neurological examination and differential diagnosis and will introduce treatment approaches. The course follows a 9-week semester.

PT 805 Musculoskeletal Examination & Intervention I – 8 hours, 3 credits

Basic examination techniques utilizing selective tissue tension tests that will be applied to evaluate and diagnose lower extremity orthopaedic conditions are presented. Joint and soft tissue mobilization techniques and specific exercises will be applied as the Physical Therapy intervention for these diagnoses.

PT 806 Clinical Experience I - 6 weeks full time, 3 credits

The first of four clinical internships in an acute care hospital setting or other setting appropriate for the objectives of this course. Under the supervision of a licensed physical therapist, the student will integrate and apply course work to provide quality care in the evaluation and treatment of patients with a variety of diagnoses.

PT 809 Directed Research I – 3 hours, Online, 1 credit

Implement the research project at the designated locations and start data collection once all IRB approval(s) are in hand. Continue until data collection is completed.

PT 810 Neurological Examination & Intervention II – 8 hours, 5 credits

This is the second of a three-course series on the examination, evaluation, intervention, plan of care and outcome measures for the adult neurological patient. Courses will be taught within the context of the ICF-model and the APTA's Guide to Physical Therapist Practice. This course series will be presented from a motor control and learning perspective by addressing the three main elements of the movement system: postural control, mobility and upper extremity function. This course will present evidenced based clinical management of the adult neurological patient.

PT 811 Cardiac Examination & Intervention – 4 hours, 2 credits

The physical therapy management of individuals with cardiovascular dysfunction is covered in this course. Physical therapy evaluations and treatment approaches.

PT 815 Acute Care Physical Therapy - 3 hours, 1 credit

This course is designed to introduce the student to the knowledge and skills necessary for a physical therapist to function in the acute care hospital setting. The student will be introduced to the various patient populations in the acute care hospital and the various roles and responsibilities of the physical therapist in this complex setting.

PT 820 Musculoskeletal Diagnosis II – 3 hours, 3 credits

Etiology and therapeutic management of selected orthopedic conditions of the upper extremity. Introduction to radiology and many of the imaging techniques used in the diagnosis of soft tissue injuries and pathological conditions.

PT 830 Prosthetics & Orthotics – 2 hours, 2 credits

This course is designed to orient the student to the role and responsibilities of the physical therapist in the field of prosthetics and orthotics. This course emphasizes advanced evaluation of normal and abnormal gait with implications for treatment intervention in order to prepare the student for working with amputees and patients requiring orthotics in the clinical setting.

PT 835 Geriatric Physical Therapy – 1 hour, 1 credit

This course is designed to foster the students' knowledge, understanding, and skills necessary to providing physical therapy to the older adult. Students will examine the aging process across physiological systems for individuals with and without other co-existing conditions. The patient management model (examination, evaluation, diagnosis, prognosis, treatment planning, intervention, and outcomes) will be discussed as it applies to this population.

PT 850 Musculoskeletal Examination & Intervention II – 5 hours, 3 credits

Basic examination techniques utilizing selective tissue tension tests that will be applied to evaluate and diagnose upper extremity and lumbar spine orthopaedic conditions are presented. Joint and soft tissue mobilization techniques and specific exercises will be applied as the Physical Therapy intervention for these diagnoses.

PT 870 Health Promotion & Wellness in Physical Therapy – 2.5 hours, 2 credits

This course defines the role of physical therapy in health prevention, promotion, and wellness. Wellness throughout the life span is emphasized through incorporating the interrelationships between physical activity, stress, mind-body connections and nutritional health.

PT 872 Current Topics in Physical Therapy – 3.5 hours, 2 credit

This required course will contain content as determined by the physical therapy faculty to enable the students to receive expanded content on one area of evidence based physical therapy practice. The topic can vary as determined appropriate by the faculty and of specific interest to students. Content can vary from semester to semester.

PT 879 Integumentary Examination & Intervention - 2 hours, 1 credit

The course focuses on evaluation and management of individuals with integumentary dysfunction. Anatomy and physiology of the skin and the principles of normal wound healing are presented. Evaluation and management of individuals with burns and wounds based on clinical presentation will be covered in a lecture and practical format. Wound prevention and patient education will also be included as part of integumentary management.

PT 880 Neurological Examination & Intervention III – 4 hours, 2 credits

This is the third of a three-course series on the examination, evaluation, intervention, plan of care and outcome measures for the adult neurological patient. Courses will be taught within the context of the ICF-model and the APTA's Guide to Physical Therapist Practice. This course series will be presented from a motor control and learning perspective by addressing the 3 main pillars of the movement system: postural control, mobility and upper extremity function. This course will present evidenced based clinical management of the adult neurological patient and will integrate content from the adult neurological course series through case-based applications.

PT 881 Organization & Management in Physical Therapy – 3 hours, 3 credits

This course is designed to provide information and develop skills to manage an organized physical therapy service. There is an emphasis on effective management principles including organizational structure, human resource management, fiscal planning, department design, continuous quality improvement and risk management. The course will also describe the external environment of health care delivery, such as, government regulation, professional ethics and medical-legal issues.

PT 882 Pediatric Physical Therapy – 5 hours, 3 credits

Through lecture, laboratory experiences, discussion, videos and assigned readings, the student will be able to examine and understand normal and abnormal human development; theory and practice of physical therapy assessment and intervention in developmental disabilities

PT 883 Pharmacology – 3 hours, 3 credits

This course is a foundational component of a sequential curriculum that is designed to provide the student with competency in the area of Pharmacology. This course covers general pharmacology with a focus on drugs and treatments commonly seen in physical therapy. Instruction in this course will serve as a foundation for the use of drugs and treatments covered in future courses.

PT 884 Musculoskeletal Examination & Intervention III – 5 hours, 3 credits

Advanced management of the spine including selective tissue testing techniques is presented. Selection of appropriate physical therapy interventions for individuals with spinal dysfunction (excluding spinal cord injury); ergonomics, joint and soft tissue mobilization; back exercise; and neural tension testing is presented.

PT 886 Clinical Experience II – 10 weeks, 5 credits

A 10 week affiliation in a facility that will serve to further refine and enhance student's skills while building on past clinical experiences.

PT 887 Clinical Decision Making – 3 hours, Online, 1 credit

This seminar will bring students together to integrate clinical decision making through case studies, case scenarios, administrative issues and the resolution of conflict within the workplace.

PT 888 Directed Research II – 3 hours, 1 credit

Strategies for effective presentation of research findings in a professional forum.

PT 889 Clinical Experience III - 9 weeks, 4.5 credits

This is the third of four clinical internship placements throughout the curriculum.

PT 890 Clinical Experience IV - 9 weeks, 4.5 credits

This is the fourth of four clinical internship placements throughout the curriculum.

PT 895 Directed Research III – 3 hours, 1 credit

Students will complete the research project and prepare a publishable manuscript.