

Course Information

DPT 720 Professional Development (2 Credits)

This course introduces theories and experiences designed to develop professional socialization in students. Skills to accurately, sensitively and assertively communicate with patients, families, and colleagues are stressed. Principles of written and oral communication and patient education are discussed. Awareness of one's ideas and feelings about the values held by one's self and others will be analyzed through class discussion, class assignments and self-reflection. Professional issues of changes in healthcare, state and local laws, standards of practice, code of ethics, quality assessment and quality assurance provided. Practice domains of the physical therapists and other allied health care professionals discussed. Prerequisites: Graduate standing in physical therapy.

DPT 726 Evidenced-Based Practice in Physical Therapy I (1 Credit)

This 1-credit course is designed to provide the student with knowledge and hands-on experience in skills required to engage in evidence-based clinical practice of physical therapy. Students will learn how to write answerable and searchable clinical questions related to physical therapy practice, search the literature, and become acquainted with various types and sources of evidence, and begin to critically analyze evidence for application in clinical practice. This is the first of 4 courses designed to strengthen critical inquiry and reasoning skills including (in sequence): Evidence-Based Practice II (DPT727), Clinical Research (DPT790), and Applied Research Statistics (DPT791).

DPT 727 Evidenced-Based Practice in Physical Therapy II (1 Credit)

This 1-credit course is designed to follow-up on DPT726, providing the student with additional knowledge and to practice skills required to engage in evidence-based clinical practice of physical therapy. Students will learn to refine their communication and critical appraise/analysis/synthesis skills in regards to research studies. Students will also gain experience in presenting topics in manners appropriate for the profession of Physical Therapy. This is the second of 4 courses designed to strengthen critical inquiry and reasoning skills followed by (in sequence): Clinical Research (DPT790), Applied Research Statistics (DPT791), and Mentored Independent Study (DPT798). Prerequisite: DPT 726.

DPT 730 Foundations of Observation and Assessment (2 Credits)

Basic patient assessment skills with an introduction to posture and gait evaluation through observation. Patient history and review of the medical record. Documentation in S.O.A.P. note and functional outcome formats. Assessment skills emphasized include: anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation. Prerequisites: Graduate standing in PT.

DPT 730L Foundations of Observation and Assessment Lab (2 Credits)

Lab of basic patient assessment skills including posture, gait evaluation, anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation. Patient history and review of medical records, documentation in SOAP format, and functional outcome formats. Co-requisite: DPT 730.

DPT 732 Therapeutic Exercise and Functional Training (2 Credits)

Holistic approach to evaluation and management of patients with various orthopaedic pathologies and dysfunctions. Emphasis placed on theoretical basis of specific functional skills interrelated with clinical decision-making methodology leading to safety awareness and proper body mechanics. Exposure to community/work reintegration and home exercise program instruction. Prerequisites: Graduate standing in PT.

DPT 732L Therapeutic Exercise and Functional Training Lab (1 Credit)

Holistic approach to evaluation and management of patients with various orthopaedic pathologies and dysfunctions. Emphasis placed on theoretical basis of specific functional skills interrelated with clinical decision-making methodology leading to safety awareness and proper body mechanics. Exposure to community/work reintegration and home exercise program instruction. Prerequisites: Graduate standing in PT.

DPT 735 Functional Training and Acute Care (4 Credits)

Performance and application of positioning skills, transfers techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning and critical analysis skills in assessment, treatment design and intervention, goal development and discharge planning for patients with spinal cord injuries. Co-requisites: DPT 744, DPT 745, DPT 730.

DPT 735L Functional Training and Acute Lab (1 Credit)

Hands-on performance and application of positioning skills, transfers techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning skills in assessment, treatment design and intervention, goal development and discharge planning for patients in the acute hospital environment. Prerequisites: DPT 735.

DPT 740 Movement Science (2 credits)

This course will introduce students to principles and theories in movement science. Students will be introduced to concepts related to motor control, motor development, and motor learning. Students will also apply these principles to the clinical practice of physical therapy and to observe and assess related phenomena in patients.

DPT 741 Orthopaedic Principles (3 Credits)

Principles of orthopaedic physical therapy including biomechanics, applied anatomy, and osteokinematic and arthrokinematic concepts examined. Musculoskeletal system investigated from histological, structural, and functional perspectives. Prerequisite: Graduate standing in PT.

DPT 742 Clinical and Pathological Physiology (5 Credits)

Fundamentals of physiology and pathology related to diseases causing abnormal movement patterns or capabilities. Processes and diseases most frequently encountered in physical therapy practice emphasized. Prerequisites: Graduate standing in PT.

DPT 744 Gross Human Anatomy I (2 Credits)

The study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems. Prerequisites: Graduate standing in PT.

DPT 744L Gross Human Anatomy I Lab (1 Credit)

Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems. Co-requisites: DPT 744.

DPT 745 Gross Human Anatomy II (2 Credits)

The study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems. Prerequisites: Graduate standing in PT.

DPT 745L Gross Human Anatomy II Lab (1 Credit)

Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems. Co-requisites: DPT 745.

DPT 746 Neuroanatomy (3 Credits)

High level immersion into the anatomy of the nervous system, emphasizing structure and functional relationships. Coursework will also relate the structural relationships of the central and peripheral nervous systems to brain dysfunction and pathology. Prerequisites: Graduate standing in PT.

DPT 746L Neuroanatomy Lab (1 Credit)

Human cadaveric dissection of the central nervous system through a series of weekly laboratory experiences with an emphasis on its three-dimensional structure. Co-requisites: DPT 746.

DPT 747 Geriatric Examination and Intervention (1 Credit)

Examination, evaluation, plan of intervention, outcomes, patient education, and health promotion as applied to the geriatric client. Issues include factors affecting normal aging, pathological aging, common pathologies associated with aging, quality of life, successful aging, care settings, reimbursement, and public policy. Prerequisites: Graduate standing in PT.

DPT 748 Pharmacology in Physical Therapy (2 Credits)

Actions and effects of pharmaceutical agents commonly encountered in the physical therapy clinical practice. Prerequisites: Graduate standing in PT.

DPT 749 Applied Exercise Physiology (2 Credits)

Review of human physiological systems responsible for the generation of energy and movement with particular emphases on muscle and cardiopulmonary physiology. Introduction to physiologic responses of the human body to exercise training. Course content focuses on physiological principles of exercise, and performance assessment. Prerequisites: Graduate standing in PT.

DPT 749L Applied Exercise Physiology Lab (1 Credit)

The Applied Exercise Physiology Lab complements the lecture (DPT 749) to provide active learning experiences to exercise assessments. Students will practice assessments of body composition, muscular fitness, strength, cardiopulmonary function, and exercise prescription. Co-requisites: DPT 749

DPT 750 Prosthetics and Orthotics (2 Credits)

Basic clinical problem solving skills integrated in the context of prosthetic and orthotic management of patients. Evaluation of medical, surgical and prosthetic and rehabilitation management of amputations. Design, fabrication and fitting of prosthetic devices as well as general orthotic principles examined. Prerequisites: DPT 730, DPT 741, and DPT 732
Prerequisites: Graduate standing in PT, DPT730, DPT741, and DPT732.

DPT 750L Prosthetics and Orthotics Lab (1 Credit)

This class complements DPT750 in providing knowledge and experience of prosthetics and orthotics application in rehabilitation. Basic clinical problem solving skills are integrated in the context of prosthetic and orthotic management of patients. Prerequisites: Graduate standing in PT.

DPT 751 Women's Health in Physical Therapy (2 Credits)

Overview of the anatomical, physiological, nutritional, psychological, and sociological influences throughout the woman's life span including: adolescence, the reproductive years, the middle years, and older age. Discussion of physical therapy management of musculoskeletal, integumentary, cardiopulmonary, and visceral pathologies common to women. Prerequisites: Graduate standing in PT.

DPT 752 Physical Agents and Electrophysiology (2 Credits)

Biological processes of injury and repair, clinical application of soft tissue techniques, thermal agents, intermittent compression, continuous motion, and mechanical traction. Advancement to clinical decision-making skills and incorporation of physical agents in therapy interventions stressed. Prerequisites: DPT 742.

DPT 752L Physical Agents and Electrophysiology Lab (1 Credit)

Hands on performance and clinical application of soft tissue techniques, thermal agents, intermittent compression, continuous motion, electrical stimulation, mechanical traction, therapeutic electrical stimulation. Prerequisites: DPT 752.

DPT 753 Electrotherapy (2 Credits)

Principles of electrophysics and neurophysiology as they pertain to the use of therapeutic electrical stimulation. Application techniques of various electrical stimulation devices are also presented. Prerequisites: DPT 742, DPT 752, DPT 730, DPT 732. This course is currently not being taught.

DPT 754 Orthopaedic Assessment in Physical Therapy (3 Credits)

Evaluation and assessment of upper and lower extremity orthopaedic problems. Functional anatomy, biomechanics, and evaluative manual therapy skills used to functionally diagnose orthopaedic pathologies and disorders. Prerequisites: DPT 730, DPT 741, DPT 744, and DPT 745.

DPT 754L Orthopaedic Assessment in Physical Therapy Lab (1 Credit)

Evaluation and assessment of upper and lower extremity orthopaedic problems. Practical application of functional anatomy, biomechanics, and evaluative manual therapy skills used to differentially diagnose orthopaedic pathologies and disorders. Prerequisites: DPT 730, DPT 741, DPT 744, and DPT 745.

DPT 759 Pediatric Rehabilitation (2 Credits)

This course provides foundational knowledge of development (typical and atypical) and an overview of pediatric physical therapy practice for children with atypical development. Presents examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and disablement/enablement models. Prerequisites: Graduate standing in PT.

DPT 759L Pediatric Rehabilitation Lab (1 Credit)

This course focuses on application of developmental concepts and an overview of pediatric physical therapy practice for children with atypical development. Provides students with opportunities to observe/engage in examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and enablement models. Prerequisites: Graduate standing in PT.

DPT 756 Neurophysiology (4 Credits)

High level immersion into the function of the human central and peripheral nervous systems based on current research and theory. Topics will include normal human motor and sensory neurophysiology, cognitive and learning neurophysiology, neuropathophysiology, neuroplasticity, neurodiagnostics and neurologic treatment options. Prerequisites: DPT 746.

DPT 757 Wound Care (2 Credits)

Clinical practice of wound care including physiology of tissue healing, wound assessment tools, dressings and treatment approaches. Processes and diseases most frequently encountered in physical therapy practice specializing in wound care. Prerequisites: DPT 742, DPT 752.

DPT 758 Diagnostic Testing and Imaging (2 Credits)

Presentation of diagnostic tests used by disciplines and specialties within and outside of the profession of physical therapy. Discussion of blood studies, nuclear medicine studies, and radiologic/X-ray studies. Interpretation of test results as it applies to physical therapy evaluation, intervention planning and treatment. Prerequisites: Graduate standing in PT.

DPT 761 Supervised Clinical Education I (3 Credits)

The first clinical affiliation is a supervised full time extended clinical learning experience 6 weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to develop introductory clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: Graduate standing in PT.

DPT 762 Supervised Clinical Education II (5 Credits)

The second clinical affiliation is a supervised, full time extended clinical learning experience 11 weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 761.

DPT 763 Supervised Clinical Education III (5 Credits)

The third clinical affiliation is 10 ½ weeks and is a supervised full time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 762.

DPT 764 Supervised Clinical Education IV (6 Credits)

The fourth clinical affiliation is 12 weeks and is a supervised full time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction. Prerequisites: DPT 763.

DPT 770 Cardiopulmonary Rehabilitation (1 Credit)

Evaluation and treatment of patients with acute and chronic cardiopulmonary disease and dysfunction. Emphasis is placed on regulation of cardiac, circulatory and pulmonary functions at rest and the responses of these systems to differing modes, intensities, and durations.

Prerequisites: Graduate standing in PT.

DPT 770L Cardiopulmonary Rehabilitation Lab (1 Credit)

Lab of basic patient skills including assessment of vital signs, breathing patterns, heart sounds, ECG interpretation, pulmonary function testing, blood gases, chest wall mobility, cough and sputum, ventilation, performance of bronchial drainage, prescribe exercises for patient with compromised cardiopulmonary function. Co-requisites: DPT 770.

DPT 772 Physical Therapy Administration (2 Credits)

General principles of organization and administration that impact the ethical and legal aspects of physical therapy practice. Topics such as budget development, cost accounting, supervision, communication skills, evaluative techniques, and methods of management and quality assurance are included. Prerequisites: Graduate standing in PT.

DPT 774 Psychosocial Aspects of Physical Therapy (2 Credits)

Social and psychological issues, which arise during illness will be examined and discussed in an open class discussion format. Emphasis will be placed on self-awareness as well as awareness of others with respect to cultural differences, religious beliefs, addictions, and coping strategies during stress. Prerequisites: Graduate standing in PT.

DPT 785 Orthopaedic Rehabilitation (2 Credits)

Manual therapy and therapeutic exercise techniques for the extremities with emphasis on specifically integrating these techniques into treatment regimes for specific orthopaedic pathologies and disorders. Students will review, integrate, and enhance knowledge from previous course work as it pertains to appropriate entry-level manual skill application.

Prerequisites: DPT 732, DPT 741, DPT 754.

DPT 785L Orthopaedic Rehabilitation Lab (1 Credit)

Orthopaedic Rehabilitation lab with supervised integration of manual therapy and therapeutic exercise techniques for the extremities. Focus will be on developing and providing treatment regimes for specific orthopaedic pathologies/ disorders. Students will refine skills from previous course work as it pertains to appropriate entry-level application. Co-requisite: DPT 785

DPT 786 Neurological Rehabilitation (3 Credits)

This course fosters clinical reasoning and critical analysis skills across elements of patient client management for individuals with neurologically-based movement disorders. Students are exposed to theory and movement science as related to clinical reasoning. Students are expected to incorporate professional behavior, scientific and clinical knowledge and critical analysis to clinical applications. Prerequisites: DPT 744, DPT 745, DPT 746, DPT 756, DPT 732, DPT 730.

DPT 786L Neurological Rehabilitation Lab (1 Credit)

This course emphasizes hands-on skill development, clinical reasoning, and critical analysis skills for all elements of patient client management for individuals with neurologically-based movement disorders across the lifespan. Students are expected to incorporate professional behavior, scientific and clinical knowledge, critical analysis and competent skill performance in laboratory and practical skill application. Co-requisites: DPT 786.

DPT 787 Balance and Vestibular Rehabilitation (2 credits)

This course will introduce students to principles and theories of rehabilitation for the patient with balance dysfunction. There will be emphasis on sound clinical reasoning and assessment of balance impairment and disability. Students will be exposed to theoretical applications of different treatment modalities in balance and vestibular rehabilitation.

DPT 788 Spine Examination and Treatment (2 Credits)

Review of spine examination including biomechanics, observation, range of motion, muscle synergy, muscle strength, joint play and special tests. Inclusion of examination schema and differential diagnosis of commonly seen spine pathology. Emphasis on hands-on examination, assessment, and treatment of spine dysfunction. Prerequisites: Graduate standing in PT.

DPT 788L Spine Examination and Treatment Lab (1 Credit)

Lab sessions focusing on hands-on examination, assessment, and treatment of spine dysfunction, including manual therapy, spinal mobilization and spinal manipulation skills. Co-requisites: DPT 788.

DPT 790 Clinical Research in Physical Therapy (3 Credits)

This is the third course in the critical inquiry course series. Students will continue to apply and build upon content knowledge and skills acquired in the evidence-based practice courses and dig deeper into the principles and concepts of research. This course will deal with the development of research questions, research methods regarding: measurement issues, experimental designs, concepts of statistical analysis, and critical review of clinically relevant research literature and proposal preparation. Students will apply this content to initiate their mentored research projects. Prerequisites: Graduate standing in PT.

DPT 791 Applied Research Statistics (3 Credits)

Review of foundations of research design and concepts of measurement in clinical study. Emphasis will be placed on hands-on data analysis and interpretation of clinically relevant research statistical methods including descriptive statistics, statistical inferences, analysis of differences, and analysis of relationships. Prerequisites: Graduate standing in PT.

DPT 793 Seminar (1 credit)

Preparation and presentation of seminars on topics of current interest in physical therapy and rehabilitation. Topic changes by semester and by course instructor; see class schedule for details.

DPT 795 Independent Study (1-3 Credits)

Course allows students to pursue a topic related to physical therapy beyond that covered in the curriculum. Satisfactory completion will be accomplished through individualized, self-directed study. Topics based on student preferences and faculty approval. May be repeated for a maximum of six credits. Prerequisites: Graduate standing in PT.

DPT 798 Directed Research (1-6 Credits)

The students will gain experience in critical inquiry by participating in new or ongoing research with faculty who serve as project advisors. Students summarize research by a written report and present each project orally to the faculty and area clinicians. May be repeated to a maximum of six credits. Prerequisites: DPT 790.