

SCHOOL OF PHYSICAL THERAPY

Web Site: <http://www.twu.edu/physical-therapy/>

Courses

Contact hours identified in the course descriptions are based on a 15-week term. Students who enroll in Summer or mini-terms are expected to meet the same total number of contact hours as a 15-week term.

PT 6001. Research Experience I. Application of scientific methods to address a relevant physical therapy question. Development or continuation of a scholarly project related to physical therapy practice, research, and/or education. One contact hour a week. Credit: One hour.

PT 6002. Primary Care in Physical Therapy. Overview of the primary care model of physical therapy practice; medical screening, differential diagnosis, and interdisciplinary collaboration. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6003. Exam, Evaluation, and Outcomes in Physical Therapy. Practical application of the examination and evaluation strategies associated with assessment in physical therapy; emphasis on evidenced-based assessment techniques. One lecture and four laboratory hours a week. Credit: Three hours.

PT 6011. Research Experience II. Application of systematic and scientific methods to address a relevant physical therapy question. Implementation of a scholarly project related to physical therapy practice, research, and/or education. Prerequisite: PT 6001. One contact hour a week. Credit: One hour.

PT 6013. Supervised Teaching in Physical Therapy. Supervised teaching for physical therapy students. Laboratory teaching under close supervision of the faculty. Weekly meetings with the instructor, individual consultation, and reports. Prerequisites: Degree in physical therapy and permission of instructor. Seven practicum hours a week. Credit: Three hours.

PT 6014. Applied Pathophysiology of Internal Systems in Physical Therapy. The body's tissue, organ, and system responses to injury, disease, or genetic condition. Focus on clinical signs, symptoms, and medical management of conditions commonly seen by physical therapists. Four lecture hours a week. Credit: Four hours.

PT 6015. Human Gross Anatomy. Structure and function of the human body for physical therapy; foundations of surface anatomy, radiology, embryology, and histology through regional dissection of the body. Three lecture and six laboratory hours a week. Credit: Five hours.

PT 6021. Research Experience III. Application of scientific methods to address a relevant physical therapy question. Dissemination of a scholarly project related to physical therapy practice, research, and/or education. Prerequisite: PT 6011. One contact hour a week. Credit: One hour.

PT 6022. Applied Pathophysiology of the Musculoskeletal System. Pathology and medical management of disease processes, genetic conditions, and injuries of the musculoskeletal system commonly seen by physical therapists. Two lecture hours a week. Credit: Two hours.

PT 6023. Research for Clinical Scientists in Physical Therapy. Research design and statistical analysis; critical evaluation of published research relevant to physical therapy; scientific writing; preparation for conducting clinical research. Three lecture hours a week. Credit: Three hours.

PT 6033. Research in Physical Therapy. Principles of evidence-based practice and critical analysis of published research relevant to physical therapy; emphasis on obtaining and evaluating evidence for clinical decision-making; research design and statistical analysis; preparation for participation in collaborative research. Three lecture hours a week. Credit: Three hours.

PT 6042. Cardiopulmonary Physical Therapy I. Cardiac and pulmonary anatomy and physiology, pathophysiology, common cardiopulmonary diseases, and basic diagnostic assessments commonly seen by physical therapists. Development of competency in the assessment of cardiopulmonary dysfunctions. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6043. Statistical Methods I for the Health Care Professional. Application of statistical procedures to answer health-related research questions or problems. Analyzing, interpreting, and reporting results of univariate, one-factor analyses of health care data. Three lecture hours a week. Credit: Three hours.

PT 6045. Neuroscience and Applied Pathophysiology of the Neuromuscular System. Neuroanatomical organization and physiological function of the human nervous system, pathology and medical management of neuromuscular diseases and injuries commonly seen by physical therapists. Four lecture and three laboratory hours a week. Credit: Five hours.

PT 6052. Cardiopulmonary Physical Therapy II. Physical therapy evaluation and management of individuals with cardiovascular and/or pulmonary diseases. Emphasis on the development and implementation of patient care plans relative to diagnostic testing, disease progression, and examination. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6073. Movement Science in Physical Therapy. Analysis of biomechanical and kinesiological principles of human movement and function with emphasis on the relationships among body structure, forces, and human movement. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6083. Advanced Instrumentation in Physical Therapy. Technical and practical considerations necessary for the effective use of instrumentation common in the physical therapy and rehabilitation fields. Three lecture hours a week. Credit: Three hours.

PT 6101. Practicum in Physical Therapy. Supervised experience in a specialized area of interest such as administration, teaching, research, or advanced evaluation and treatment procedures. Prerequisites: Degree in physical therapy and permission of instructor. May be repeated for credit. Four practicum hours a week. Credit: One hour.

PT 6102. Professional Practice I. Application of professional practice issues in various physical therapy settings. Emphasis on communication, documentation, supervision, healthcare delivery and reimbursement, leadership, legal/ethical standards, time management, advocacy, and professional development. Two lecture hours a week. Credit: Two hours.

PT 6103. Advanced Practicum in Physical Therapy. Supervised experience in a specialized area of interest such as administration, teaching, research, or advanced evaluation and treatment procedures. Prerequisites: Degree in physical therapy and permission of instructor. Nine practicum hours a week. Credit: Three hours.

PT 6113. Directed Practicum in Physical Therapy. Directed practical experience in a specialized area of physical therapy; content may include teaching, administration, research, or application of advanced clinical procedures. Prerequisites: Degree in physical therapy and permission of instructor. Eight practicum hours a week. Credit: Three hours.

PT 6122. Prostheses, Orthoses, and Advanced Gait. Pathological gait in individuals with neuromuscular, musculoskeletal, and/or integumentary involvement; use of orthoses and/or prostheses to address gait and function. Changes in gait across various diagnoses, interventions, and orthotic and prosthetic management. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6152. Health Promotion and Wellness II. Community health promotion process that enables individuals to increase control over and improve their health by focusing on various social and environmental interventions. Prerequisite: PT 6201. Co-requisite: PT 6251. Two lecture hours a week. Credit: Two hours.

PT 6173. Foundations of Physical Therapy Interventions. Principles of therapeutic exercise, biophysical agents, and other interventions for impairments of body structure, function, activity limitations, and societal roles and responsibilities. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6191. Applied Statistical Methods for the Health Care Professional. Application of appropriate statistical analysis to health care related clinical research examples and datasets with appropriate rationale for selected analysis. Prerequisites: PT 6043 and PT 6243. One lecture hour a week. Credit: One hour.

PT 6193. Psychometric Properties of Rehabilitation. Assessment of the uses, advantages, reliability, validity, and sources of error of evaluation procedures and measurement tools commonly used in physical therapy. Three lecture hours a week. Credit: Three hours.

PT 6201. Health Promotion and Wellness I. Application of health promotion and wellness theories and strategies commonly implemented by physical therapists for well individuals and those with chronic conditions. Development of a community-based service-learning project. One lecture hour a week. Credit: One hour.

PT 6213. Computer Applications in Physical Therapy Research. Application of research design and computer systems to problems in physical therapy research. Emphasis on advanced computational skills for the clinical researcher and academician. Three lecture hours a week. Credit: Three hours.

PT 6243. Statistical Methods II for the Health Care Professional. Application of advanced statistical procedures to health-related research questions or problems. Analyzing, interpreting, and reporting results of multivariate, multi-factor, and regression analyses of health care data. Prerequisite: PT 6043. Three lecture hours a week. Credit: Three hours.

PT 6251. Health Promotion and Wellness Practicum. Application of the community health promotion process in the context of a community practicum. Focus on enabling individuals to increase control over and improve their health by exploring various social and environmental interventions. Prerequisite: PT 6201. Co-requisite: PT 6152. 30 practicum hours. Credit: One hour.

PT 6302. Integumentary Physical Therapy. Physiologic examination of integumentary system; emphasis on differential diagnosis, treatment, and referral relative to body structure, function, activity limitations, and societal roles and responsibilities. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6303. Field Research in Physical Therapy. Designs, data collection techniques, and analyses for field research in physical therapy. Critical application of surveys, observational studies, case studies, and single case designs to clinical field problems in physical therapy. Emphasis is on the development of analytical skills requisite for field research in physical therapy. Prerequisites: Degree in physical therapy and permission of instructor. Seven practicum hours a week. Credit: Three hours.

PT 6344. Musculoskeletal Physical Therapy I. Examination, evaluation, diagnosis, prognosis, and interventions of individuals with musculoskeletal conditions of the thoracic spine, lumbar spine, pelvic girdle, and lower extremities; emphasis on manual therapy, therapeutic exercise, and other therapeutic interventions. Two lecture and six laboratory hours a week. Credit: Four hours.

PT 6353. Pediatric Physical Therapy. Motor, cognitive, and psychosocial development; neonatology; evaluation and treatment of children with developmental disorders and other chronic medical conditions; legal and ethical considerations; emphasis on family-centered care. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6354. Neuromuscular Physical Therapy I. Examination, evaluation, diagnosis, prognosis, and interventions of individuals with neurological conditions associated with acquired brain injury including traumatic injury, stroke, and other balance disorders. Emphasis on condition-specific outcome measures, current theories of neuroplasticity, motor control, motor learning, and therapeutic interventions. Two lecture and six laboratory hours a week. Credit: Four hours.

PT 6364. Musculoskeletal Physical Therapy II. Examination, evaluation, diagnosis, prognosis, and interventions for individuals with musculoskeletal conditions of the cervical spine, temporomandibular joint, and upper extremities; emphasis on manual therapy, therapeutic exercise, and other therapeutic interventions. Two lecture and four laboratory hours a week. Credit: Four hours.

PT 6374. Neuromuscular Physical Therapy II. Examination, evaluation, diagnosis, prognosis, and interventions of individuals with neuromuscular conditions associated with spinal cord injury, degenerative diseases, and vestibular disorders with an emphasis on condition-specific outcome measures, current theories of neuroplasticity, motor control, motor learning, and therapeutic interventions. Two lecture and four laboratory hours a week. Credit: Four hours.

PT 6384. Clinical Experience I. Application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management within an inpatient, orthopedic, or neuro-rehabilitation setting. 320 practicum hours. Credit: Four hours.

PT 6394. Clinical Experience II. Application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management within an inpatient, orthopedic, or neuro-rehabilitation setting. Prerequisite: PT 6384. 320 practicum hours. Credit: Four hours.

PT 6403. Neuromuscular Integration and Applications. A comprehensive foundation for the management of the person with a neuromuscular pathology for the practicing physical therapist using the older person post-stroke as a model. Emphasis on securing and applying relevant in-depth information. Three lecture hours a week. Credit: Three hours.

PT 6404. Clinical Experience III. Application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management within an inpatient, orthopedic, or neuro-rehabilitation setting. Prerequisite: PT 6394. 320 practicum hours. Credit: Four hours.

PT 6413. Cardiopulmonary Integration and Application. A comprehensive foundation for the management of persons with cardiovascular and/or pulmonary pathology for the practicing physical therapist using the older person as a model. Emphasis on securing and applying relevant in-depth information. Three lecture hours a week. Credit: Three hours.

PT 6415. Clinical Experience IV. Application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management in a clinical setting. Prerequisite: PT 6404. 400 practicum hours. Credit: Five hours.

PT 6453. Principles Geriatric Physical Therapy II. Aging theories and age-related changes; chronic problems associated with aging, critical examination of anti-aging research, and effect of physical aging on other dimensions of life; applications for therapist practice including health promotion and wellness. Three lecture hours a week. Credit: Three hours.

PT 6483. Principles of Geriatric in Physical Therapy I. Principles of gerontology with emphasis on psychological processes and social aspects of aging with implications for physical therapists. Three lecture hours a week. Credit: Three hours.

PT 6503. Introduction to Grantsmanship in Physical Therapy. Overview of concepts in constructive research leading to competitive grantsmanship for physical therapists. May include invited presentations of funded projects, exemplary research proposals, and grant management. Students will identify funding sources and develop a grant proposal. Prerequisites: PT 6023 and PT 6193, or equivalent, or permission of instructor. Three lecture hours a week. Credit: Three hours.

PT 6513. Topics in Evidence-Based Practice. Search and appraisal of evidence for tests and measures, interventions, diagnosis, and prognosis used in advanced physical therapist practice; clinical decisions based on the evidence. Three lecture hours a week. Credit: Three hours.

PT 6523. Teaching and Learning in Physical Therapy. Preparation for careers in physical therapy higher education; concepts and techniques of effective teaching and enhanced learning, such as theories of learning, teaching styles, methods of instruction, syllabus development, and evaluation/assessment processes. Three lecture hours a week. Credit: Three hours.

PT 6533. Academic Issues in Physical Therapist Education. Organizational and functional aspects of graduate professional educational program. Includes university structure and governance, models of scholarship, faculty roles, faculty issues (tenure, promotion, academic freedom, development), student issues (recruitment, retention, advising/mentoring), and clinical education. Three lecture hours a week. Credit: Three hours.

PT 6603. Female Anatomy for Physical Therapists. Anatomy and physiology of urogenital and endocrine systems of women. Includes cadaveric dissection and laboratory study of female reproductive tract, external genitalia, pelvic floor, breasts, and related structures. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6613. Women's Health for Physical Therapists. Specialization and evidence-based practice in women's health, medical and physical therapist management of common conditions and procedures, and issues for female athletes. Three seminar hours a week. Credit: Three hours.

PT 6622. Clinical Integration. Clinical decision-making for complex patients with multi-system involvement; practice management issues commonly seen by physical therapists and evidence-based practice. Two lecture hours a week. Credit: Two hours.

PT 6623. Physical Therapy Management of Women's Health I. Physical therapist management of women with focus on musculoskeletal issues of pelvis and abdomen for the non-pregnant woman. Includes pelvic examination for physical therapist practice, differential diagnosis, and evidence-based interventions. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6633. Physical Therapy Management of Women's Health II. Physical therapist management of women with focus on musculoskeletal issues of pelvis and abdomen for the pregnant woman. Includes management of high risk pregnancy and post-partum care. Prerequisite: PT 6623. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6653. Foundations of Physical Therapy Practice. Foundational overview of professional practice and behaviors of physical therapists. Application of safe patient care techniques, professional communication, legal and ethical issues, and teaching and learning strategies. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6663. Advanced Differential Diagnosis in Orthopedic Physical Therapy. Principles of differential diagnosis in orthopedic manual therapy; development of critical clinical thinking in orthopedics, basic medical screening, rational differential diagnosis, and selection of manual and mechanical interventions of the musculoskeletal system. Three lecture hours a week. Credit: Three hours.

PT 6703. Gross Human Anatomy for Occupational Therapy. Study of the structure and function of the human body through regional pro-section of the body. Introduction to surface anatomy and radiology. Co-requisites: OT 6113, OT 6122, and OT 6183. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6713. Development Across the Lifespan. Typical growth and development in the neurosensory, neuromuscular, cardiovascular, pulmonary, integumentary, and musculoskeletal systems associated with age. Relationship of development to physical therapy management with an overview of health promotion, prevention, wellness, and healthy behaviors across the lifespan. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6731. Experiential Learning. Introduction to the clinical environment through a supervised, part time experience. Emphasis on observation and reflection of characteristics of professional practice as demonstrated by various health care providers. Clinical integration activities support knowledge integration from the classroom. Four clinical hours a week. Credit: One hour.

PT 6743. Professional Practice II. Application of professional practice issues commonly seen by physical therapists that affect health outcomes of individuals and society; development of public policy and legislation, advocacy, and psychosocial aspects of rehabilitation. Prerequisite: PT 6102. Three lecture hours a week. Credit: Three hours.

PT 6773. Clinically Applied Neuroscience. Integration of neuroanatomy, neurophysiology, motor control, motor learning theory, neuroplasticity, and use of diagnostic techniques utilizing a patient case-based approach. Three seminar hours a week. Credit: Three hours.

PT 6843. Professional Practice III. Entrepreneurship, marketing, leadership, administration, management of services, and electives related to advanced clinical practice topics in physical therapy. Prerequisite: PT 6743. Three lecture hours a week. Credit: Three hours.

PT 6901. Special Topics. Concentrated study of a particular topic in physical therapy. May be repeated for credit when topic varies. Prerequisite: Permission of the instructor. One lecture hour a week. Credit: One hour.

PT 6902. Special Topics. Concentrated study of a particular topic in physical therapy. May be repeated for credit when topic varies. Prerequisite: Permission of the instructor. Two lecture hours a week. Credit: Two hours.

PT 6903. Special Topics. Concentrated study of a particular topic in physical therapy. May be repeated for credit when topic varies. Prerequisite: Permission of instructor. Three lecture hours a week. Credit: Three hours.

PT 6911. Independent Study. Variable content. May be repeated for credit as topic varies. Prerequisite: Permission of instructor. Credit: One hour.

PT 6913. Independent Study. Variable content. Individual research or study relating to a problem of professional interest and significance. May be repeated for credit as topic varies. Prerequisite: Permission of instructor. Credit: Three hours.

PT 6971. Integration of Theory & Research in Physical Therapy. Demonstration of independent ability to analyze, synthesize, and critically examine theory and research in physical therapy through written and oral comprehensive examinations. Prerequisites: PT 6023, PT 6043, PT 6191, PT 6193, PT 6213, and PT 6243.

PT 6983. Dissertation. May be repeated for credit. Only three credits apply toward degree. Credit: Three hours.

PT 6993. Dissertation. May be repeated for credit. Only three credits apply toward degree. Prerequisite: PT 6983. Credit: Three hours.