

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. Critical Inquiry in Physical Therapy I. Application of the scientific method to research questions in physical therapy. Includes planning of research projects aimed at making contributions to evidence-based physical therapy practice. One contact hour a week. Credit: One hour.

PT 6002. Primary Care in Physical Therapy. Overview of the primary care model of medicine in the context of physical therapy practice; includes medical screening and interdisciplinary collaboration. Two lecture hours a week. Credit: Two hours.

PT 6003. Exam, Evaluation, and Outcomes in Physical Therapy. Practical application of the evaluation strategies associated with functional assessment in physical therapy; emphasis on evidence-based functional assessment, principles, techniques, and related impairment measures. Two lecture and three laboratory hours a week. Credit: Three hours.

PT 6011. Critical Inquiry in Physical Therapy II. Application of the scientific method to research in physical therapy. Collaboration with faculty advisors to implement projects proposed in Critical Inquiry I. Prerequisite: PT 6001. Four contact hours 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. Clinical Management in Internal Medicine. Gross and histological reactions of tissue, organs, and systems to injury or disease; correlation of pathology with clinical signs and symptoms; medical management of disease processes, genetic conditions, and injuries commonly seen by physical therapists with emphasis on internal medicine. Four lecture hours a week. Credit: Four hours.

PT 6015. Human Gross Anatomy. Study of the structure and function of the human body; introduction to 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. Critical Inquiry in Physical Therapy III. Application of the scientific method to research in physical therapy. Evaluation, summary, and presentation of project results in a public forum. Prerequisite: PT 6011. Four contact hours a week. Credit: One hour.

PT 6022. Clinical Management of the Musculoskeletal System. Pathology and medical management of disease processes, genetic conditions, and injuries commonly seen by physical therapists with emphasis on musculoskeletal disorders. 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 6024. Clinical Neuroscience. Organization and physiological function of the human nervous system with emphasis on topics relevant to the practice of physical therapy. Three lecture and two laboratory hours a week. Credit: Four hours.

PT 6032. Clinical Management of the Neuromuscular System. Pathology and medical management of disease processes, genetic conditions, and injuries commonly seen by physical therapists with emphasis on neuromuscular disorders. Two lecture hours a week. Credit: Two hours.

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

PT 6041. Introduction to Exercise Testing and Prescription in Physical Therapy. Basic physiological responses to activity or exercise and physiological adaptations in response to training; energy storage and utilization as well as exercise prescriptions for healthy individuals and clients with selected diseases. Student participation in exercise testing and programs during lab sessions. Two laboratory hours a week. Credit: One hour.

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 6061. Basic Physical Therapy Skills. Application of physical therapy treatment procedures with primary emphasis on such basic patient care techniques as transfers, positioning, assisted exercise, and assisted gait. Two laboratory hours a week. Credit: One hour.

PT 6072. Developmental Concepts: Adolescence to Geriatrics. Changes associated with age in the neurosensory, neuromuscular, cardiovascular, pulmonary, integumentary, and musculoskeletal systems as related to physical therapy management. One lecture and two laboratory hours a week. Credit: Two hours.

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

PT 6082. Professional Practice in Physical Therapy. Orientation to professional aspects of physical therapy, including communication, cultural competence, documentation, ethics, evidence-based practice, legal issues, and effective teaching strategies. Two lecture hours a week. Credit: Two 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. Practice Management Issues I. Application of practice management issues in the physical therapy setting: emphasis on communication, documentation, supervision, reimbursement, time management, and psychosocial aspects of patient care in preparation for first clinical affiliation. 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 6111. Practice Management Issues II. Overview of various influences within the health care environment, including payment systems, development of public policy and legislation, and the scope of physical therapy practice at the local, state, and federal levels. Prerequisite: PT 6102. One lecture hour a week. Credit: One hour.

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 6121. Practice Management Issues III. Exploration of the leadership role of the physical therapist as a manager of clinical services. Prerequisite: PT 6111. One lecture hour a week. Credit: One hour.

PT 6122. Prostheses, Orthoses, and Advanced Gait. Pathological gait of patients with neuromuscular, musculoskeletal, and/or integumentary involvement. Includes prostheses, orthoses, changes in gait across the lifespan, energy costs, therapeutic interventions, and patient/family education. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6131. Practice Management Issues IV. Overview of healthcare delivery and payment systems related to physical therapy practice. Includes governmental and legal parameters, and current issues facing the continuum of care. Prerequisite: PT 6121. One lecture hour a week. Credit: One hour.

PT 6141. Clinical Integration I. Integration of curricular content to date within the framework of a collaborative problem-based learning model; emphasis on clinical reasoning and problem solving. One lecture hour a week. Credit: One hour.

PT 6142. Health Promotion and Wellness I. Overview of health promotion, fitness, and wellness strategies for well individuals and those with activity limitations commonly seen in physical therapy practice; emphasis on attitudes towards health, illness, and disability and their effect on individual goals, motivations, and interpersonal relationships. Two lecture hours a week. Credit: Two hours.

PT 6151. Psychosocial Aspects of Rehabilitation. Psychosocial issues related to physical therapy; includes the roles of mental health professionals, advocates, and family; patient-therapist communication; sexuality and disability; and abuse. One lecture hour a week. Credit: One hour.

PT 6152. Health Promotion and Wellness II. Public health, social responsibility, and participation in physical therapy practice; emphasis on improving health outcomes in well and disabled populations. Prerequisite: PT 6142. One lecture and two practicum hours a week. Credit: Two hours.

PT 6161. Therapeutic Exercise and Intervention IV. Advanced soft tissue interventions and complementary exercise approaches to physical therapy patient care. Prerequisite: PT 6162. Two laboratory hours a week. Credit: One hour.

PT 6162. Therapeutic Exercise and Intervention II : Lower Quadrant. Use of therapeutic exercise and other interventions (e.g., soft tissue techniques, orthotics/taping, and integration of therapeutic modalities) for the treatment of impairments; activity limitations; and participation restrictions in patients who have musculoskeletal, neuromuscular, or integumentary system involvement of the lower quadrant. Prerequisite: PT 6173. One lecture and two laboratory hours a week. Credit: Two hours.

PT 6171. Therapeutic Exercise and Intervention III: Upper Quadrant. Use of therapeutic exercise and other interventions (e.g., soft tissue techniques, orthotics/taping, and integration of therapeutic modalities) for the treatment of impairments and functional/activity limitations in patients of all ages who have musculoskeletal, neuromuscular, or integumentary system involvement of the upper quadrant. Prerequisites: PT 6173 and PT 6162. Two laboratory hours a week. Credit: One hour.

PT 6173. Therapeutic Exercise and Intervention I. Principles of basic therapeutic exercise, soft tissue techniques, and adjunctive biophysical agents; emphasis on management of patients in the acute phase of recovery/healing from soft tissue injuries or surgery, including detection/prevention of post-operative complications and adverse effects of immobilization. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6181. Professional Development for the Physical Therapist. Exploration of issues related to maintaining and expanding professional competence in the broad context of physical therapy practice. Prerequisites: PT 6082, PT 6102, PT 6111, and PT 6121. One lecture hour a week. Credit: One hour.

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 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 6302. Integumentary Physical Therapy. Integration of basic and clinical sciences in the physical therapy examination, differential diagnosis, and treatment of patients with pathologies, impairments, and disabilities involving the integumentary and vascular systems. 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 6323. Neuromuscular Physical Therapy I. Principles of evaluation and physical therapy treatment of patients with neuromuscular complications associated with brain injury and cerebral vascular accident; emphasis on current theories of motor control and therapeutic interventions. Two lecture and three laboratory hours a week. Credit: Three hours.

PT 6343. Neuromuscular Physical Therapy II. Principles of evaluation and physical therapy treatment of patients with neuromusculoskeletal conditions including, but not limited to, spinal cord injury and vestibular disorders; emphasis on current treatment models. Prerequisite: PT 6323. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6353. Pediatric Physical Therapy. Normal motor, cognitive, and psycho-social development; neonatology; evaluation and treatment of children with developmental disorders and other chronic medical conditions; pediatric sports medicine; and legal and ethical considerations. Two lecture and two laboratory hours a week. Credit: Three hours.

PT 6363. Musculoskeletal Physical Therapy: Lower Quadrant. Principles of evaluation and physical therapy treatment of patients with musculoskeletal problems of the lumbar spine, pelvis, and lower extremities; emphasis on manual therapy strategies. Two lecture and three laboratory hours a week. Credit: Three hours.

PT 6373. Musculoskeletal Physical Therapy: Upper Quadrant. Evaluation and physical therapy management of patients with musculoskeletal disorders of the cervico-thoracic spine and upper extremity; emphasis on manual therapy and functional rehabilitation. Two lecture and three laboratory hours a week. Credit: Three hours.

PT 6383. Cardiopulmonary Physical Therapy. Physical therapy evaluation and management of patients with cardiovascular and/or pulmonary diseases. Emphasis on the integration of results from diagnostic tests and measures with physical findings in order to develop plans of care and implement appropriate intervention. Two lecture and two laboratory hours a week. Credit: Three 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 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 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 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 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 6731. Preliminary Clinical Experience. Supervised, part time, onsite exposure to the inpatient clinical environment. Emphasis on observation and reflection of characteristics of professional practice as demonstrated by various health care providers. Four clinical hours a week. Credit: One hour.

PT 6733. Clinical Experience I. First of four supervised full-time clinical experiences. Application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management in the inpatient setting or outpatient orthopedic setting. One lecture and sixteen clinical 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 6802. Clinical Integration II. Clinical decision-making for complex patients with multi-system involvement; includes practice management issues such as accountability and outcomes assessment. Prerequisite: PT 6141. Two lecture hours a week. Credit: Two hours.

PT 6804. Clinical Experience II. Second of four supervised full-time clinical experiences; application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management in either the orthopedic or neuro-rehabilitation setting. Prerequisite: PT 6733. Eighteen to twenty clinical hours a week. Credit: Four hours.

PT 6814. Clinical Experience III. Third of four supervised full-time clinical experiences; application of physical therapy knowledge, skills, and behaviors appropriate to patient and practice management in either the orthopedic or neuro-rehabilitation setting. Prerequisite: PT 6804. Eighteen to twenty clinical hours a week. Credit: Four hours.

PT 6816. Clinical Experience IV. Integration of skills learned in the first seven semesters; integration of knowledge from basic sciences with information from clinical courses in examination/evaluation and interventions for the patient with impairments in body structure and/or function, activity limitations, and participation restrictions relating to musculoskeletal or neurological pathologies. Prerequisite: PT 6814. Forty clinical hours a week. Credit: Six 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.