PT - Physical Therapy

Courses numbered 500 to 799 = undergraduate/graduate. (Individual courses may be limited to undergraduate students only.) Courses numbered 800 to 999 = graduate.

PT 700. Pathophysiology for PT (3).
Focuses on the differentiation of major disease pathophysiology at the micro and macro levels. Content is specific to physical therapists and emphasizes causes and effects on the overall physical capacities of a patient/client as they relate to prevention and rehabilitation.

PT 708. Introduction to Professional Practice I (2).
Focuses on foundational concepts of the profession of physical therapy and doctoral professions. Knowledge in psychological development and dynamics is related to interactions with patients and clients. Students have the opportunity to evaluate individual values and personality preferences that influence their interactions with others, and to develop interpersonal skills for working effectively with patients, families and professional colleagues. Appreciation of psychological and social diversity is emphasized.

PT 709. Foundations of Therapeutic Exercise (3).
An introduction to the scientific principles of therapeutic exercise foundations and techniques for physical therapists. Designed to follow the Guide to Physical Therapist Practice. Laboratory sessions include skill development for safe, effective use of commonly used therapeutic exercise equipment.

PT 725. Anatomy for Physical Therapists (6).
Presents a regional approach to the structure of the human body, using supervised dissection of human cadavers, observation of prosected materials, radiographic films and anatomical models. Emphasis is placed on surface anatomy and the neuromuscular, cardiovascular and skeletal systems.

PT 731. Clinical Kinesiology (3).
Details and analyzes kinesiological and biomechanical foundations that are required to differentiate causes of musculoskeletal dysfunction.

PT 736. Physical Agents (4).
Presents concepts and practical applications of a host of therapeutic modalities. Indications, contraindications and the appropriateness of these modalities are assessed.

PT 741. Clinical Practicum and Seminar I (2).
The first of a two-course series that builds on the integration of physical therapy knowledge, skills and professional values within a seminar setting and part-time clinical experience. A variety of professional and practice issues are examined, and the student gains observational experiences in a variety of acute, outpatient and rehabilitation settings.

PT 751. Foundations of Research (2).
Critical analysis of the scientific literature focusing on design and statistics for physical therapy and related disciplines. Successful completion of this course gives the student a foundation for designing and interpreting a research project or paper.

Details major classes of pharmacological agents. Pharmacokinetics, mechanisms of action, side effects, drug interactions, contraindications, therapeutic use and appropriate drug monitoring are addressed. Clinical application of this knowledge emphasizes the physical therapist's role in assessment, management and proper referral of patients experiencing subtherapeutic benefits or drug-related problems.

PT 761. Clinical Practicum and Seminar II (2).
The second of a two-course series that culminates with the integration of physical therapy knowledge, skills and professional values within a seminar setting and part-time clinical experience. A variety of professional and practice issues are examined, and the student gains observational experiences in a variety of acute, outpatient and rehabilitation settings.

PT 770. Musculoskeletal Clinical Medicine (2).
Differentiates etiology, diagnosis, pathology, medical treatment and prognosis for orthopedic conditions that are managed by physical therapists.

PT 771. Critical Inquiry I (2).
The first in a series of three consecutive research application courses following Foundations of Research for physical therapy and related disciplines. Students work with an assigned adviser to plan either a research project or a research paper, that will be implemented and evaluated in subsequent courses.

PT 772. Foundations of Clinical Skills (2).
Provides specialized instruction for common patient care skills including bed positioning, transfers, gait training with assistive devices, vital signs, infection control and selected screening tests.

PT 773. Neuroscience I (2).
First of two courses describing the relationship of structure and function of the nervous system with selected neuromuscular conditions. Specifically covers the spinal cord, cerebral cortex, autonomic nervous system, and the effects of injury/disease to these structures. For students enrolled in physical therapy education program.

PT 774. Neuromuscular Interventions I (2).
First of three courses detailing examination, assessment and interventions for patients with neuromuscular conditions. Patients with spinal cord injuries and cerebral vascular accident are assessed and evaluated.

PT 781. Foundations of Musculoskeletal Examination and Intervention (3).
Emphasizes the scientific foundation and clinical rationale used during assessment, evaluation and intervention with musculoskeletal conditions. Provides specialized instruction in the art of palpating surface anatomy, performance of manual muscle testing, and goniometric measurements. An emphasis is placed on the clinical and scientific literature pertaining to evaluation and treatment of musculoskeletal conditions.

PT 790. Selected Topics in Physical Therapy (1-4).
Intensive study of current issues, technology, research and application of selected topic.

PT 799. Experimental Course (1-4).
One-time course offerings.

PT 821. Professional Practice I (2).
The first of two courses designed to provide students with an overview of health systems, health regulation, risk management, and administrative theory and principles as related to the practice of physical therapy. Primary focus is health policy and health systems.

PT 831. Musculoskeletal Management of the Upper Quarter (3).
Emphasizes the scientific foundation and clinical rationale used during assessment, evaluation and intervention with musculoskeletal conditions. Builds on the foundations from various courses during the first year of the DPT curriculum. It provides an in-depth study of different injuries and lesions, specific evaluation techniques, and treatments of those injuries and pathologies of the upper quarter. Emphasis is placed on organizing and synthesizing information from courses throughout the physical therapy curriculum to allow integration of problem-solving skills that enables students to better make the transition from students to competent practicing physical therapists.
PT 840. Directed Study (1-3).
Individual study with a focus developed in collaboration with a departmental faculty member. Allows students to pursue an area of special interest in physical therapy.

PT 848. Life Span of the Adult (2).
Focuses on the relationship of structure and function to the development of movement skills through older age. First of two courses.

PT 851. Critical Inquiry II (2).
The second in a series of three consecutive research application courses following Foundations of Research for physical therapy and related disciplines. Students work with an assigned adviser to collect data, complete statistical analyses (as appropriate), and complete a preliminary draft of either a research project or a research paper.

PT 852. Clinical Education I (8).
Prepares the student to provide physical therapy care in varied settings requiring communication and interpersonal relations skills, professional socialization, application of physical therapy procedures, beginning development of a generalist in physical therapy. Graded S/U.

PT 853. Neuroscience II (2).
Second of two courses describing the relationship of structure and function of the nervous system with selected neuromuscular conditions. Specifically covers the brainstem, cerebellum, basal ganglia and diencephalon, and the effects of injury/disease to these structures. For students enrolled in physical therapy education program.

PT 854. Neuromuscular Interventions II (2).
Second of three courses detailing examination, assessment and interventions for patients with neuromuscular conditions. Patients with problems of the visual system and the basal ganglia are assessed and evaluated.

PT 858. Prosthetics & Orthotics (2).
Addresses selected integumentary system conditions and special conditions. Focuses on examination, clinical decision making, and treatment planning for patients/clients with these conditions. Interventions using prosthetics and orthotics are emphasized. Roles of other health care team members including prosthetists and orthotists and interactions with physical therapists are discussed relative to these conditions.

PT 859. Integumentary Conditions and Acute Care (2).
Addresses selected integumentary system conditions and the acute care practice setting. Focuses on examination, clinical decision making, and treatment planning for these conditions. Roles of other health care team members and interactions with physical therapists in the acute care settings are discussed relative to integumentary conditions. Prerequisite: departmental consent.

PT 861. Professional Practice II (3).
The second of two courses designed to provide students with an understanding of health systems, health regulation, risk management, and administrative theory and principles as related to the practice of physical therapy. The primary focus is understanding legal concerns, risk management, and planning, applying and interviewing for employment in the physical therapy profession.

PT 871. Critical Inquiry III (2).
The third in a series of three consecutive research application courses following Foundations of Research for physical therapy and related disciplines. Students work with an assigned adviser to finalize and disseminate either a research project or a research paper and give a formal oral presentation of their work.

PT 874. Neuromuscular Interventions III (2).
Third of three courses detailing examination, assessment and interventions for patients with neuromuscular conditions. Patients with problems of sensory integration, motor control and the vestibular system are assessed and evaluated.

PT 877. Clinical Knowledge and Practice in Cardiovascular and Pulmonary Conditions (2).
Develops clinical skills in examining, assessing and managing patients/clients with cardiovascular and pulmonary impairments. Common pathophysiology of the cardiovascular and pulmonary system are covered.

PT 881. Musculoskeletal Management of the Lower Quarter (3).
Reviews the basic scientific foundation and clinical rationale used during evaluation, assessment and treatment of musculoskeletal conditions of the lower quarter. Elaborates on the foundations brought forth from various courses during the first year of the DPT curriculum. Evokes an in-depth study of different injuries and lesions, specific evaluation techniques, and treatments of those injuries and pathologies. Emphasis is placed on organizing and synthesizing information from courses throughout the physical therapy curriculum to allow integration and problem-solving skills that enables students to better make the transition from students to competent practicing physical therapists.

Introduces the student to the basic scientific foundation and clinical rationale used during evaluation, assessment and treatment of musculoskeletal conditions of the cervical/thoracic spine and TMJ. Designed to build on the foundations brought forth from previous courses. Studies in depth different injuries and lesions, specific evaluation techniques, and treatments of those injuries and pathologies of the cervical spine, thoracic spine and TMJ. Emphasis is placed on organizing and synthesizing information from courses throughout the physical therapy curriculum to allow integration and problem solving skills that enable students to better make the transition from students to competent practicing physical therapists.

Introduces the student to the basic scientific foundation and clinical rationale used during evaluation, assessment, and treatment of musculoskeletal conditions of the lumbar spine and pelvis. Designed to build on the foundations brought forth from previous courses. Studies in depth different injuries and lesions, specific evaluation techniques, and treatments of those injuries and pathologies of the lumbar spine and pelvis. Emphasis is placed on organizing and synthesizing information from courses throughout the physical therapy curriculum to allow integration and problem solving skills that enables students to better make the transition from students to competent practicing physical therapists.

Focuses on the relationship of structure and function to the development of movement skills from birth through adolescence. Second of two courses.

Applies teaching and learning theories as they apply to physical therapy education of patients, students, health professionals and community. Methods of evaluating instruction, content, strategies and learners are included.

Course specializes in teaching advanced orthopedic manual physical therapy techniques. Designed to follow the Guide to Physical Therapist Practice. Laboratory sessions include skill development for safe, effective use of manual therapy techniques, including mobilizations and manipulations. Prerequisite: departmental consent.
PT 932. PT Sports Orthopedics (2).
Introduces the student to the basic foundation of sports physical therapy. Includes education related to assessment and treatment of sports related injuries, emergency care, and musculoskeletal conditions, skin conditions, environmental conditions and use of protective equipment. Designed for individuals ultimately seeking specialization in the area of sports physical therapy and eventually working toward ABPTS—Sports PT Section Advanced Clinical Competencies.

PT 933. Advances in Orthotics (1).
Introduces the student to the rationale and the clinical application of a variety of treatment approaches for patients with hand or foot pathology. Splint fabrication and application for the upper extremity are covered. Lower extremity orthotics prescription, ordering, fabrication and fitting are covered.

PT 934. PT Advanced Strength and Conditioning in the Athletic Population (2).
Introduces the student to the basic foundation of strength and conditioning principles. Includes education related to assessment of strength and power in the athletic population, adaptations to such training, and program design for this specialized population. Designed for physical therapists ultimately seeking specialization in the area of athletic strength and conditioning, with goals of pursuing certification in Olympic weightlifting and/or as a certified strength and conditioning specialist.

PT 941. PT Program Planning, Implementation and Evaluation I (2).
Students develop a service learning or clinical program with five primary components: needs analysis, program proposal, marketing, delivery and assessment.

PT 942. PT Program Planning, Implementation and Evaluation II (2).
Students continue to develop a service learning or clinical program with five primary components: needs analysis, program proposal, marketing, delivery and assessment.

PT 943. Practice Management (2).
Designed for the student whose goals are to manage a therapy department and/or start a private practice. Familiarizes students with assessing the marketplace, developing policies and procedures for the department/practice, planning and designing a facility, hiring personnel and other staffing considerations, marketing the department/practice, budgeting, knowing requirements necessary to meet local, state and federal regulations, and developing a business plan. The student partners with an appropriate mentor.

PT 951. Evidence-Based Practice (1).
Focuses on the use of current best evidence from clinical care research in the management of patients. Students gain knowledge of how to understand and appraise evidence from research.

PT 953. Clinical Education II (10).
First in a series of three 10-week courses offering continued development of clinical management of patients in varied clinical settings. Includes managerial aspects of care, teaching and some opportunities for clinical research.

PT 954. Clinical Education III (10).
Second in a series of three 10-week courses offering continued development of clinical management of patients in varied clinical settings. Includes managerial aspects of care, teaching and some opportunities for clinical research.

PT 955. Clinical Education IV (10).
Last in a series of three 10-week courses offering continued development of clinical management of patients in varied clinical settings. Includes managerial aspects of care, teaching and some opportunities for clinical research.

PT 961. Women’s Health Physical Therapy (2).
Introductory course in the study of anatomy, diagnosis and treatment of topics in women's health physical therapy. Topics include evaluation and treatment techniques for obstetrical and postpartum clients, urinary and fecal incontinence, chronic pelvic pain, osteoporosis and female athlete considerations.

PT 975. Diagnostic Imaging for the Physical Therapist (1).
Normal and abnormal radiographic findings in the spine and extremities are covered. Cinemaradiography, functional radiographs, MRI, CT-Scan and tomography are studied. A variety of pathologies affecting the practice of physical therapy are identified. Radiographic findings are correlated to common surgical procedures seen by the physical therapist. Radiographic findings as well as physical findings that require prompt referral to other disciplines within the health care team are also addressed.

PT 980. Licensure Exam Review (1).
Students review and apply knowledge and skills learned in preceding academic semesters and clinical education experiences, learn test taking strategies, and develop a comprehensive study plan to assist them in preparing for the National Physical Therapy Examination.

PT 990. Clinical Conference I (1).
Forum for discussion of a clinical case presented by a group of students. Facilitates application and integration of didactic information from the classroom into clinical practice by expanding clinical problem solving through examination of clinical cases. A formal presentation covering selected background information is followed by a presentation of the case. Ideally, research supporting the reliability/validity of evaluation tools and efficacy of treatment is presented as well. Designed to afford students the opportunity to work as a team to present clinical cases to their peers and faculty.