Physical Therapy (PT)

Courses

PT 440. Introduction to the Theory and Practice of Physical Therapy in the United States. 2-20 hours.
International students further develop and apply learning from their physical therapy curriculum in an academic training environment that fosters learning, inquiry, critical thinking, and global awareness of contemporary physical therapy practice. Course Information: Satisfactory/Unsatisfactory grading only. No graduation credit. Field work required. Prerequisite(s): Successful completion of all previous didactic and fieldwork courses required by the home institution, and a letter of recommendation from a PT faculty member at the home institution; and English proficiency. Restricted to visiting physical therapy students from international universities. Class Schedule Information: To be properly registered, student must enroll in one Lecture-Discussion and one Laboratory.

PT 502. Measuring Motor Development and Function. 3 hours.
Psychometric characteristics of standardized tests of motor development and function. Survey of tests, test evaluation, interpretation of test scores, and application to clinical practice. Course Information: Prerequisite(s): Consent of the instructor and a graduate-level course in statistics.

PT 503. Analysis of Motor Development. 3 hours.
Sensorimotor development in children, relating changes to maturation, skill acquisition, motor learning, environmental influences and individual differences. Includes critical review of current literature. Course Information: Prerequisite(s): Consent of the instructor. Recommended background: Prior experience in or knowledge of child development. Course is targeted to graduate and professional students pursuing health-related degrees.

PT 504. Assessment of Developmental Processes in Infancy. 2 hours.
Motor and behavioral competencies of the newborn, both term and preterm. Assessment of behavior and motor dysfunction in infants; analysis of the literature on intervention. Course Information: Prerequisite(s): Consent of the instructor and credit or concurrent registration in a graduate-level course in statistics.

PT 505. Advances in Rehabilitation Sciences I. 3 hours.
Highlights the advances in the knowledge in rehabilitation of neurological, pediatric and geriatric populations. Provides exposure to methods of assessment, treatment and outcome measurements, and basic understanding of recovery of functions. Course Information: Prerequisite(s): Graduate or professional standing; and consent of the instructor.

PT 506. Advances in Rehabilitation Sciences II. 3 hours.
Highlights advances in knowledge in non-pharmacological management of pain and rehabilitation of orthopedic and cardiopulmonary populations. Covers assessment, treatment and outcome measurements, and basic understanding of recovery of functions. Course Information: Prerequisite(s): Graduate or professional standing; and consent of the instructor.

PT 510. Control of Posture and Locomotion. 2 hours.
Review and analysis of normal and developmental aspects, assessment, disorders, and rehabilitation of balance and gait disorders. Course Information: Prerequisite(s): PT 562; and consent of the instructor.

PT 511. Therapeutic Intervention. 3 hours.
Provides clinicians with an approach to integrate research into practice. The goal is to acquire skills to evaluate therapeutic interventions in the literature and in practice. Course Information: Prerequisite(s): Consent of the instructor.

PT 520. Mechanics of Joint Dysfunction. 3 hours.
Principles of mechanics applied to pathology of joint components; mechanical and neurological implications of extremity and spinal joint dysfunction; critical review of pertinent literature. Course Information: Prerequisite(s): PT 519. Class Schedule Information: To be properly registered, students must enroll in one Laboratory-Discussion and one Lecture.

PT 521. Biomechanics of Locomotor Dysfunction. 3 hours.
Principles of mechanics applied to the study of human movement and walking pattern. Kinematic and kinetic analysis of normal and pathological deviations. Course Information: Prerequisite(s): Human Physiology and Anatomy I or equivalent courses and consent of instructor.

PT 562. Neuropastaticity and Rehabilitation. 2 hours.
A review of evidence and mechanisms underlying neuroplasticity from a neural-behavioral perspective. Emphasis is on the adult brain and neuroplasticity related to learning and aging, and brain repair with focus on rehabilitation after brain injury. Course Information: Prerequisite(s): Consent of the instructor. Recommended background: NEUS 501 and PT 605 and KN 252 and PSCH 184.

PT 563. Research Methods in Rehabilitation Sciences. 3 hours.
Provides students with foundational skills in clinical research including: formulation of research questions, research designs, and review of outcome measures. Students will develop a research study proposal. Course Information: Prerequisite(s): Consent of the instructor and any graduate-level statistics course.

PT 570. Planning and Evaluating Intervention Programs in Various Settings. 3 hours.
Planning, implementation, and evaluation of services for children with special needs. Emphasis on conceptual frameworks in human development and family systems. Program planning and evaluation. Course Information: Prerequisite(s): Consent of the instructor. Recommended background: Prior experience or knowledge of child development.

PT 571. Biomechanics of Normal and Abnormal Movement. 3 hours.
Principles of statics and dynamics exemplified by human movements. Examination of muscle mechanics, joint forces, stability. Redundancy and intersegmental interactions in multijoint movements. Course Information: Same as KN 571. Prerequisite(s): Consent of the instructor.

PT 572. Psychology of Motor Control and Learning. 3 hours.
Advanced principles of the control and acquisition of complex, voluntary skills. Course Information: Same as KN 572. Prerequisite(s): KN 572; or consent of the instructor.

PT 574. Instrumentation for Motor Control Research. 3 hours.
Introduction to oscilloscopes, amplifiers, filters, and transducers. Origin and processing of electromyograms. Motion capture and processing techniques. Course Information: Same as KN 574. Prerequisite(s): KN 571 or PT 571.

Designed to promote clinical reasoning and understanding of the research literature for enhancement of evidenced based clinical practice with an emphasis on extremity joint dysfunction.
Designed to promote clinical reasoning and understanding of the research literature for enhancement of evidenced-based clinical practice with an emphasis on spinal joint dysfunction.

PT 582. Advanced Manipulation and Orthopedic Manual Physical Therapy I: Extremities. 3 hours.
Designed to provide an evidenced-based approach toward evaluation and management of peripheral musculoskeletal disorders, including thrust and non-thrust manipulation. Course Information: Prerequisite(s): Must be a U.S. licensed physical therapist.

PT 583. Advanced Manipulation and Orthopedic Manual Physical Therapy II: Spine. 3 hours.
Designed to provide an evidenced-based approach toward evaluation and management of spinal musculoskeletal disorders, including thrust and non-thrust manipulation. Course Information: Prerequisite(s): Must be a U.S. licensed physical therapist.

PT 584. Clinical Mentorship I: Extremities. 3 hours.
Physical therapy practice under the tutelage of a mentor. Students will apply and master skills, techniques and reasoning methods learned in the didactic coursework. Emphasis is on peripheral musculoskeletal disorders. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): Instructor approval required; must be a U.S. licensed physical therapist.

PT 585. Clinical Mentorship II: Spine. 3 hours.
Physical therapy practice under the tutelage of a mentor. Students will apply and master skills, techniques and reasoning methods learned in the didactic coursework. Emphasis is on spinal musculoskeletal disorders. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): Instructor approval required; must be a U.S. licensed physical therapist.

PT 586. Physical Therapy Residency Mentorship. 2-4 hours.
Students will learn to apply and develop advanced skills in a specialized clinical environment that fosters learning, inquiry, and critical/creative thinking through mentorship of experienced clinicians. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated to a maximum of 10 hours. Prerequisite(s): Students must have successfully completed each of the following: 1. Successfully graduated from an entry-level DPT program. 2. Be licensed to practice as a physical therapist in the State of Illinois or be scheduled to sit for the board exam. 3. Students scheduled to sit for the board exam must pass the exam on their first attempt or will be withdrawn from the class.

PT 587. Post Professional Residency: Clinical Educator Practicum. 1-5 hours.
Designed for students in the Clinical Educator Track-Post-Professional Orthopedic Physical Therapy Residency to become proficient in: developing/delivering lectures, running/assisting in labs and becoming clinical educators for PT and PTA students. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated to a maximum of 10 hours. Prerequisite(s): Students must have successfully completed each of the following: 1. Successfully graduated from an entry-level DPT program. 2. Be licensed to practice as a physical therapist in the State of Illinois or be scheduled to sit for the board exam. 3. Students scheduled to sit for the board exam must pass the exam on their first attempt or will be withdrawn from the class.