

## **Physical Therapy**

### **PT 6600 HUMAN GROSS ANATOMY I 4.0**

Human Gross Anatomy I.

Prerequisite: Entry into Physical Therapy Program, co prerequisite PT 6610, or consent of instructor. This is a combined lecture laboratory program designed to present an understanding of basic and clinical human anatomy. Detailed regional analyses of the upper and lower extremities will be performed.

### **PT 6610 FUNCTIONAL ANATOMY I 4.0**

Functional Anatomy I.

Prerequisite: Entry into Physical Therapy Program, co prerequisite PT 6600, or consent of instructor. This course introduces the student to the theory and practical application of basic tests and measures related to the anatomical structures in the extremities. Assessment procedures that will be taught include palpation, muscle strength testing, range of motion and flexibility testing. The course is designed to apply content from Human Gross Anatomy (PT 6600) to the functioning human being.

### **PT 6630 EVIDENCE-BASED PRACTICE I 2.0**

Evidence-based Practice I

Prerequisite: Entry into the PT program and successful completion of all prior DPT courses.

This course enhances the efficacy of patient/client interventions and outcome and promotes best practice paradigms.

### **PT 6650 CLINICAL INTERNSHIP I 1.0**

Clinical Internship I.

Prerequisite: Entry into Physical Therapy program.

The student is assigned to a physical therapy clinic for 40 hours during the semester under the direct supervision of a clinical instructor. The emphasis of the clinical experience is on professional socialization, observation of patient management models, professionalism and to assist with basic direct patient care as deemed appropriate by the clinical instructor.

### **PT 6700 CLIN PHYSIOLOGY AND PATHOPHYS 3.0**

Clinical Physiology and Pathophysiology I. Prerequisite: Entry into Physical Therapy Program or consent of instructor. 3 lecture hours per week. An introduction to clinical applications of physiology and associated pathologies of the endocrine, reproductive, renal, hepatic/GI/biliary and musculoskeletal systems with emphasis on musculoskeletal function.

### **PT 6709 PROF PRACTICE: DR PROFESSION 3.0**

Professional Practice: The Doctoring Profession.

Prerequisite: Entry into Physical Therapy Program or consent of instructor. This is the first in a three course series on professional practice designed to enhance student growth and

professional development. This course focuses on written and oral communication issues and skills, and addresses professional and patient perspectives. Students will be introduced to the history of physical therapy, the American Physical Therapy Association and its foundational documents including the Guide to Physical Therapist Practice. Physical therapy professional attributes and professional behaviors will be highlighted. Chart review, medical terminology, and an introduction to 3rd party payer systems practice will be included.

### **PT 6800 HUMAN GROSS ANATOMY II 3.0**

Human Gross Anatomy II. Prerequisite: Successful completion of all previous lower numbered PT courses. Co-requisite PT 6810. This course is designed to present an understanding of basic and clinical human anatomy. Detailed regional analyses of the head, neck, trunk and spine will be performed.

### **PT 6810 FUNCTIONAL ANATOMY II 3.0**

Functional Anatomy II. Pre-requisite: Successful completion of all previous lower numbered PT courses, co-requisite PT 6800. This course introduces the student to the theory and practical application of basic tests and measures related to the anatomical structures in the spine. Assessment procedures that will be taught include palpation, muscle strength testing, range of motion and flexibility testing and sensory testing. The student will also begin to understand the relationships of visceral organs and their role in mimicking musculoskeletal pain complaints. The course is designed to apply content from Human Gross Anatomy II (PT 6800) to the functioning human being.

### **PT 6900 PT MANAGEMENT CARDIOPULM 3.0**

PT Management of Cardiopulmonary Disorders Pre-requisite: Successful completion of all prior Physical Therapy coursework Physical therapy examination, evaluation, diagnosis, prognosis, and intervention for patients with primary and secondary disorders of the cardiovascular/pulmonary systems.

### **PT 6910 EXERCISE PHYSIOLOGY 2.0**

Exercise Physiology Prerequisites: Successful completion of all prior physical therapy coursework. This course provides fundamental knowledge about the adaptability of human physiological systems in meeting a range of exercise demands. Areas covered include energy transfer during rest and exercise, physiologic and performance adaptations, and exercise prescription for health adults. Research evidence regarding how exercise and physical activity impact health and wellness is included.

### **PT 7025 PT MANAGEMENT MED SURG 3.0**

PT Management: Acute Medical, Surgical Pathology. Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor. This course exposes the student to a variety of medical and

surgical conditions commonly encountered by the physical therapist. Pathophysiology of the endocrine, gastrointestinal, and genitourinary systems are highlighted. Signs, symptoms, onset, course/progression, related laboratory values, and medical management are discussed in the context of physical therapy management. Basic principles of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics will be addressed. Key concepts of drug administration, dose-response relationships, drug interactions, and factors influencing the effectiveness of medications are discussed. Students will answer clinical questions to distinguish the diverse classes of drugs as well as understand both practical and theoretical implications of drug use for selected populations.

### **PT 7030 PT INTERVENTIONS I 3.0**

Physical Therapy Interventions I

Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor

This course is designed to provide the student with practical experience in clinical examination skills and interventions. The course will emphasize physical therapy interventions including but not limited to positioning, functional mobility training, gait training, passive and active exercise, chest physical therapy, and the application of heat and cold modalities.

### **PT 7040 PT INTERVENTIONS II 2.0**

Physical Therapy Interventions II

Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor.

This course introduces the student to examination, evaluation, and intervention of the integumentary system.

### **PT 7130 PT INTERVENTIONS III 4.0**

PT Interventions II Prerequisite: Successful completion of all prior physical therapy coursework. This course will focus on physical therapy interventions including exercise prescription, therapeutic modalities, PNF and mobilization. Emphasis will be on selection of appropriate treatment, modification of intervention according to response, and evaluation of results.

### **PT 7140 TAI CHI- THERAPEUTIC EXERCISE 3.0**

Tai Chi- Therapeutic Exercise. PT 7140/4140 is a graduate/undergraduate course introducing Tai Chi as a therapeutic exercise. The course addresses the benefits of Tai Chi exercise, Tai Chi's origins, philosophy, and development. Scientific evidence of Tai Chi's benefits to health is discussed. The course introduces all the styles and forms of Tai Chi and the application of Tai Chi to self defense, exercise, rehabilitation, and meditation. Students learn how to perform and to teach Tai Chi. Application of the principles and practices of Tai Chi to various impairments and disabilities is demonstrated.

### **PT 7250 CLINICAL INTERNSHIP II 5.0**

Clinical Internship II

Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor.

This is the second of five clinical internships. The student will complete 8 weeks of a full-time internship with the major emphasis being the application of patient examination, evaluation, diagnosis, prognosis and interventions related to current and completed course work.

### **PT 7600 RESEARCH I: METHODOLOGY 3.0**

Research I: Methodology.

Prerequisite: Successful completion of all previous lower numbered PT courses. This is the first of a four course sequence on evidence-based practice designed to provide the knowledge and skills necessary to critically analyze and use scientific literature to improve clinical practice, develop a research question, collect and interpret data, and disseminate results in professional forums. In this course, the student is introduced to principles of evidence-based practice, scientific methods, research design, hypothesis generation and testing, measurement theory, and analysis of data across experimental and survey paradigms.

### **PT 7610 MEDICAL SCREENING 2.0**

Essentials of Medical Screening. Prerequisite: Successful completion of all previous lower numbered PT courses. This course introduces the student to principles of medical screening with emphasis on the evaluation of examination data. The art and science of a patient/client referral to other healthcare professionals is introduced per the APTA Code of Ethics, APTA Guide to Professional Conduct and the Guide to Physical Therapist Practice. The rationale for when and why specific diagnostic imaging and testing procedures are ordered will be presented. Emphasis will be placed on how to relate/ apply the information in clinical decision-making by the physical therapist.

### **PT 7615 MOVEMENT SCIENCES I 3.0**

Movement Sciences Prerequisites: Successful completion of all prior physical therapy coursework. This course exposes the student to basic principles of movement science and motor control, kinematics and kinetics related to movement with application of these principles to the study of gait and transitional movements across the lifespan. Biomechanical rationale for movement analysis will be emphasized.

### **PT 7620 MOVEMENT SCIENCES II 2.0**

Movement Sciences II Prerequisite: Successful completion of all prior physical therapy coursework. This course builds on the principles of movement science and motor control by exposing the student to the theories of motor learning and the application of principles of biomechanics and kinesiology to abnormal movement.

### **PT 7625 PT MANAGEMENT MUSC/SKEL I 3.0**

PT Management of Musculoskeletal Disorders I Prerequisite: Successful completion of all prior physical therapy coursework. This course introduces the student to common

musculoskeletal pathologies of the cervical spine, temporomandibular joint, upper thoracic spine, and rib cage. Information from the foundational sciences of anatomy, functional anatomy, physiology, pathology, pharmacology, and medical screening are linked to various examination and intervention philosophies.

### **PT 7626 PT MANAGEMENT MUSC/SKEL II 3.0**

PT Management of musculoskeletal Disorders II Prerequisites: Successful completion of all prior physical therapy coursework. This course introduces the student to common musculoskeletal pathologies of the upper extremities including shoulder, elbow, wrist and hand. Information from the foundational sciences of anatomy, physiology, pathology, pharmacology, and medical screening are linked to various examination and intervention philosophies.

### **PT 7630 LIFE SPAN I 2.0**

Life Span I Prerequisite: Successful completion of all previous lower numbered PT courses. This course will focus on the growth and development of the individual from conception through senescence. Development for each stage will be examined with attention to the individual differences and variations related to physical, psychosocial, and cognitive changes.

### **PT 7660 COM & ALTERN THERAPIES 3.0**

Complementary and Alternative Therapies. This course provides students with information about Complementary and Alternative Therapies (CAT) including the applications of CAT in therapeutic situations. The curing medicine and therapeutic modalities addressed include Acupuncture and Acupressure, Traditional Chinese Medicine, Herbal Medicine, Energy Medicine, Ayurvedic Medicine, Body/ Mind Therapy, Homeopathic Therapy, Massage and Touch Therapy and Nutrition and Diet.

### **PT 7700 RESEARCH II: INVESTIGATIONS 2.0**

Research II: Investigations

Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor.

This course is the second in a series of four courses designed to continue the inquiry process. This course will emphasize the developmental sequence of a research project from initiation through completion of the process and presentation of the product.

### **PT 7709 PROF PRACT II: PSYCHOSOC 3.0**

Professional Practice II: Psychosocial Aspects of Disability and Disease.

Pre-requisite: Entry into the PT program and successful completion of all prior PT courses. Students explore the basic concepts and principles essential to the understanding of the therapist/client/ family reactions to disability and disease. Concepts of behavior management, death and dying, lifestyle adaptation, and attitudes toward disability are presented with respect to their influence on physical, psychosocial, and cultural aspects of an individual's quality of life. Examination of

legal and ethical issues that impact physical therapy delivery are also discussed.

#### **PT 7710 PT MANAGEMENT NEURO I 4.0**

Neuroanatomy and Neurophysiology.

Prerequisite: Entry into Physical Therapy program and successful completion of all prior DPT courses or consent of instructor.

This course is designed to introduce basic and applied neuroanatomical and neurophysiological principles. Topics include terminology and neuroanatomical relationships, cellular neurophysiology, structure and function of the central, peripheral, and autonomic nervous systems and their ability to respond to environmental demands. The student will evaluate human behavior and performance in relation to function and dysfunction of the nervous system.

#### **PT 7725 PT MGT MUSCULOSKEL III 3.0**

PT Management of Musculoskeletal Disorders III Lumbar, Pelvis and Hip Prerequisite: Entry into Physical Therapy Program and successful completion of all prior DPT courses.

The emphasis of this course is the application of biological and physical sciences in the examination, evaluation, diagnosis, prognosis, and management of patients/clients with musculoskeletal disorders of the lumbar spine, pelvis, and hip.

#### **PT 7726 PT MGT MUSCULOSKEL IV 3.0**

Patient Management Musculoskeletal IV Knee, Foot and Ankle

Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. The emphasis of this course is the application of biological and physical sciences in the examination evaluation, diagnosis, prognosis and management of patients/clients with musculoskeletal disorders of the knee, foot, and ankle. Their interdependence with the hip and lumbo-pelvic region are also discussed to facilitate a lower body approach to these regions.

#### **PT 7800 EVIDENCE-BASED PRAC II 1.0**

Evidence-based Practice II Prerequisite: Entry into the PT program and successful completion of all prior DPT courses.

This is a web-based course that is concurrent with Clinical Internship III. The student formulates clinical questions and utilizes strategies learned in EBP I. This enhances the efficacy of patient/client interventions and outcomes and promotes best practice paradigms.

#### **PT 7810 PT MGT NEUROMUSC DISORDER II 3.0**

PT Management of Neuromuscular Disorders: Evaluation

Prerequisite: Entry into Physical Therapy Program and successful completion of all prior DPT courses. This course is designed to introduce students to the physical therapy examination, evaluation, diagnosis, prognosis, and management of individuals with the movement dysfunction secondary to progressive and non-progressive acquired neuromuscular disorders. Pathophysiology, clinical manifestations, diagnostic procedures, evidence-based practices, and interdisciplinary management, along with prevention, are included in discussion of brain pathologies

commonly encountered in physical therapy practice.

### **PT 7820 PT MGT: NEUROMUSC DISORDER III 2.0**

PT Management of Neuromuscular Disorders: Application

Prerequisite: Entry into Physical Therapy Program and successful completion of all prior DPT courses. This course is designed to provide the student with the practical experiences facilitating integration and application of a variety of rehabilitation approaches for individuals with disorders and diseases of the nervous system. Clinical examination skills and interventions that parallel the content in PT 7810 are emphasized. Traditional techniques such as neurodevelopment treatment (NDT), proprioceptive neuromuscular facilitation (PNF), and sensory regulation are presented, practiced, and applied to patient cases.

### **PT 7825 PROSTHETICS AND ORTHOTICS 2.0**

Prosthetics and Orthotics Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. This course provides both theory and application of orthotic and prosthetic devices and equipment utilized in physical therapy practice.

### **PT 7850 CLINICAL INTERNSHP III 5.0**

Clinical Internship III. Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. This is the third of five clinical internships. The student will complete 8 weeks of a full-time clinical internship with the major emphasis being the application of patient examination, evaluation, diagnosis, prognosis and interventions to current and completed coursework.

### **PT 7980 RESEARCH PRACTICUM 1.0 to 15.0**

Research Practicum Directed research in collaboration with a faculty member. For graduate assistants. Does not count towards degree requirements.

### **PT 8140 HEALTH PROMOTION WELLNESS 4.0**

Health Promotion and Wellness Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This course focuses on interventions for the prevention of movement impairments and the promotion of health and wellness across the lifespan. This course broadly defines the role of physical therapy in promoting health, reducing health disparities, and improving quality of life across the lifespan. The influence of lifestyle and behaviors on health and the physical therapist's ability to screen and intervene with exercise, cardiovascular conditioning, stress reduction, and nutrition counseling is explored.

### **PT 8600 RESEARCH III: SYNTHESIS 3.0**

Research III: Synthesis Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This course is third in a series of four courses designed to continue the inquiry process. These courses emphasize the

developmental sequence of a research project from initiation through completion of the process and presentation of the product.

### **PT 8670 LIFE SPAN IV GERIATRICS 3.0**

Lifespan IV- Geriatrics and the Multisystem Patient.

Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This course is designed to review theories of physiological and psychological aging and the impact of specific aging changes on the physical therapy management of conditions associated with aging. Age-related modifications and guidelines for examination and intervention procedures are discussed and applied to case studies representing medical conditions encountered in geriatric physical therapy practice. Pathophysiology, diagnostic procedures, evidence-based and interdisciplinary management, and prevention are included in the context of patient management.

### **PT 8700 EVIDENCED BASED PRACTICE III 1.0**

Evidence-Based Practice III Prerequisite: Entry into the PT program and successful completion of all DPT courses. This is web-based course that is concurrent with Clinical Internship V. The student will formulate clinical questions and utilize strategies learned in EBP I and II to enhance the efficacy of patient/client interventions, outcomes, and promote best practice paradigms.

### **PT 8709 PROF PRACT III: MANAGEMENT 3.0**

Professional Practice III: Management. Prerequisite: Entry into the PT program and successful completion of all DPT courses. This course focuses on the management of physical therapist autonomous practice in a variety of health care settings including, but not limited to, private practice, hospital, nursing home, home health, and other health care systems. A number of broad concepts and categories including the evolution of third-party reimbursement systems and managed-care, Medicaid, and the legal aspects of health care and physical therapy practice. Management concepts including human resources, continuous quality improvement, patient-centered care, interdisciplinary team management are discussed.

### **PT 8715 LIFESPAN II : PEDIATRICS 3.0**

PT Management: Pediatric Physical Therapy. Prerequisite: Entry into Physical Therapy Program and successful completion of all prior DPT courses. This course provides and overview of examination, evaluation, diagnosis, prognosis, management, and intervention of children with neuromuscular disorders utilizing clinical case examples. Common clinical diagnoses are discussed, including examination and intervention strategies, given various practice settings. Clinical decision-making is described in terms of a family-centered, culturally-competent, team approach.

### **PT 8720 LIFESPAN III: PEDIATRICS APPL 1.0**

PT Management: Pediatric Physical Therapy Lab.

Prerequisite: Successful completion of all previous lower

numbered PT courses. Corequisite: PT 8715. This laboratory course will provide practical experiences of clinical examination and intervention skills that parallel the lecture component of the course. The course will emphasize concepts of clinical decision-making for children with disabilities.

### **PT 8725 PT MGT OF NEUROMUSC DIS IV 3.0**

PT Management of Neuromuscular Disorders: CNS and PNS  
Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This course focuses on the examination, evaluation, diagnosis, prognosis and management of patients/clients with neuromuscular disorders affecting the spinal cord and peripheral nervous system. Pathophysiology, clinical manifestations, diagnostic and imaging procedures, evidence-based practice, and interdisciplinary team management, and prevention are included in the discussion of pathologies of the spinal cord and peripheral nervous system.

### **PT 8730 PT MGT OF NEUROMUSC DIS V 2.0**

PT Management of Neuromuscular Disorders: CNS and PNS Applications  
Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This application course is designed to provide the student with practical experiences facilitating integration and application of the physical therapy interventions and a variety of rehabilitation approaches for individuals with disorders of the spinal cord and peripheral nervous system.

### **PT 8800 RESEARCH IV: DISSEMINATION 1.0**

Research IV: Dissemination  
Prerequisite: Entry into the PT program and successful completion of all prior DPT courses.  
This is the fourth in a four-course sequence on research in physical therapy. These courses emphasize the developmental sequence of a research project from initiation through completion of the process and presentation of the product. Preparation and presentation of the research project is required in poster and platform style at a state or national meeting. Research is written in manuscript format in preparation for submission to a peer-reviewed journal.

### **PT 8825 PT MGT MUSCULOSKEL V 4.0**

PT Management of Musculoskeletal Disorders V- Manipulation Thrust and Non-thrust. Prerequisite: Entry into PT program and successful completion of all prior DPT courses. This course emphasizes the best practice models for the examination, evaluation, diagnosis, prognosis, and management of patients/clients with musculoskeletal disorders. A variety of classification systems are presented to identify patients who will most likely benefit from selected interventions. Interventions emphasized include thrust and non-thrust manipulations of the extremities and axial skeleton.

### **PT 8840 PT INTERVENTION IV 3.0**

PT Interventions Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. This course

emphasizes the interventions that can be utilized in a variety of patient conditions to improve, enhance, and prevent further deterioration of movement impairment. These interventions include, but are not limited to myofascial trigger point dry needling, myofascial release, craniosacral therapy, strain-counterstrain, mobilization with movement, and active release techniques. Students enhance their ability to identify patients most likely to benefit from selected interventions based on evidence-based practice, research, and patient values.

**PT 8850 CLINICAL INTERNSHIP IV 5.0**

Clinical Internship IV. Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. This is the fourth of five clinical internships. The student completes 8 weeks of full-time internship with the major emphasis being the application of patient examination, evaluation, diagnosis, prognosis and interventions related to current and completed coursework.

**PT 8900 SPEC PROB IN PHYS THERAPY 3.0**

Special Problems in Physical Therapy. Individual study of a selected problem of interest under the direction of a faculty member.

**PT 8920 SPL TOPICS PHYS THERAPY 1.0 to 12.0**

Special Topics in Physical Therapy. Individual study of a selected topic under the direction of a faculty member.

**PT 8930 SPECIAL TOPICS 3.0**

Special Topics in Physical Therapy. Individual study of a selected topic under the direction of a faculty member.

**PT 8950 CLINICAL INTERNSHIP V 5.0**

Clinical Internship V  
Prerequisite: Entry into the PT program and successful completion of all prior DPT courses.  
This is the last of five clinical internships. The student completes 8 weeks of a full-time internship with the major emphasis being the application of patient examination, evaluation, diagnosis, prognosis, and interventions related to current and completed coursework. Students demonstrating the core values of professionalism and outstanding clinical and academic performance may request an area of practice that they want to experience prior to graduation.

**PT 9000 COMPREHENSIVE EXAMINATION 2.0**

Comprehensive Examination. Prerequisite: Entry into the PT program and successful completion of all prior DPT courses. The purpose of the comprehensive review is to ascertain the student's readiness to graduate and to sit for the national licensing examination. Test-taking strategies and an intensive review of the curriculum prepare students for entry into the physical therapy profession. Successful completion of the comprehensive examination is required for completion of the DPT program.