PHYSICAL THERAPY (PHYT)

PHYT 5000 Gross Anatomy
[4 credit hours (4, 0, 0)]
Students will study the structure of the human body using the struction-function relationship as the course paradigm. Musculoskeletal, vascular, and peripheral nervous system anatomy will be emphasized, as will the coordinated role of these structures, both locally and regionally, in producing movement of the axial skeleton and extremities. Competencies serve as a foundation for clinical science coursework, particularly in the musculoskeletal and neuromuscular areas of practice.
Term Offered: Summer

PHYT 5020 Lifespan I
[2 credit hours (0, 0, 0)]
The first of two, this course examines typical lifespan development from birth to adolescence. Emphasis is on theoretical constructs, gross motor development, physical therapy examination, diagnosis, prognosis and evaluation of findings. Also includes an overview of fine motor development, cognitive development, reflex development, interaction with families, public laws and child abuse.
Term Offered: Summer

PHYT 5050 Analysis of Movement
[4 credit hours (4, 0, 0)]
This course is an integrated study of applied biomechanics, kinesiology, and anatomy as they relate specifically to the analysis of human movement. Observational skills will be emphasized for analysing human movement, although students will be introduced to the use of other evaluation tools such as EMG motion analysis, and videography. Progressing from simple movements to those that are more complex and from normal to pathological, students will learn to integrate observational skills with an understanding of musculoskeletal function and neuromuscular control. Using cases of pathological conditions student will practice hypothesis generation and identification of examination data necessary for effective clinical reasoning. PhyT5000 Gross Anatomy is a prerequisite and provides a foundation for the objectives this course hopes to achieve.
Prerequisites: PHYT 5000 with a minimum grade of D- or PHYT 500 with a minimum grade of D-
Term Offered: Fall

PHYT 5090 Neuroscience
[5 credit hours (5, 3, 0)]
An introduction to the nervous system, including fundamental concepts in neuroanatomy and neurophysiology as they relate to human movement and basic body function mediated by the central and peripheral nervous systems. Emphasis is placed on the effects of neurological conditions (disease, injury, mental illness) relevant to physical therapy and functional performance. Basic clinical assessment skills of neurological impairments will integrate neuroscience information with clinical practice.
Term Offered: Spring

PHYT 5110 Clinical Pathophysiology I
[1 credit hour (1, 0, 0)]
Integrated study of physiological and pathophysiological processes that influence the human body at the cellular, organ and systemic levels. Emphasis on mechanisms of and clinical manifestations of common diseases with discussion of potential impact on the delivery of PT services. Content to serve as the basis for discussion of pharmacology in subsequent courses.
Term Offered: Summer

PHYT 5120 Clinical Pathophysiology II
[3 credit hours (3, 0, 0)]
Second of 2 courses that address the integrated study of normal physiological and pathophysiological processes in human body at cellular, organ, and systemic levels - emphasises on clinical manifestations and impact on PT plan of care.
Term Offered: Fall

PHYT 5170 Evidence Based Practice I
[2 credit hours (0, 0, 0)]
Introduction to the principles of measurement and research design, with an emphasis on critically evaluating the design of research studies relevant to clinical practice.
Term Offered: Spring

PHYT 5180 Evidence Based Practice II
[2 credit hours (0, 0, 0)]
The second of a two course series on the principles of measurement and research design, with an emphasis on the statistical analysis procedures commonly used in clinical research. The critical evaluation and analysis of research studies relevant to clinical practice will also be emphasized.
Term Offered: Summer

PHYT 5190 Clinical Pathophysiology III
[3 credit hours (3, 0, 0)]
Study of the theoretical basis for, and the application of thermal, mechanical, and electrical modalities used for the PT management of clients. Emphasis is on evidence-based practice, critical thinking, and clinical decision-making using a case-based format, and review of the scientific literature will be used in determining the most appropriate use of modalities within a comprehensive PT plan of care.
Term Offered: Summer

PHYT 5270 Applied Exercise Physiology
[3 credit hours (0, 0, 0)]
Exploration of exercise physiology principles as related to promotion of PT patients/clients’ health and wellness. Emphasizes physiological and biochemical changes with exercise/training and exercise testing and prescription for PT patients/clients.
Term Offered: Spring

PHYT 5280 Therapeutic Interventions I
[2 credit hours (0, 0, 0)]
The theory and practice of physical therapy in the acute care setting as it relates to improvement of functional mobility, prevention of complications, and preparation for next level of care.
Term Offered: Spring

PHYT 5290 Therapeutic Interventions II
[2 credit hours (2, 0, 0)]
Study of the theoretical basis for, and the application of thermal, mechanical, and electrical modalities used for the PT management of clients. Emphasis is on evidence-based practice, critical thinking, and clinical decision-making using a case-based format, and review of the scientific literature will be used in determining the most appropriate use of modalities within a comprehensive PT plan of care.
Term Offered: Summer
PHYT 5300 Principles of Therapeutic Exer
[2 credit hours (2, 0, 0)]
Application of scientific principles in anatomy, applied biomechanics, and exercise physiology to develop sound therapeutic exercise procedures. Emphasis on development of skills associated with therapeutic exercise for patients with musculoskeletal and/or general movement dysfunction. Students will learn how to use and apply a variety of common fitness and rehabilitation exercise apparatus and develop appropriate PT treatment plans that include exercise for a given patient problem.

Term Offered: Spring

PHYT 5350 Intro to Examination
[2 credit hours (0, 0, 0)]
Introduction to the physical examination process, including history-taking, systems review and screening. Emphasis on basic PT examination skills of the cardiovascular, musculoskeletal, and integumentary systems. Skills include: assessment of tolerance to functional activity (vital signs), posture, pain, peripheral pulses and edema; goniometry; and strength testing.

Term Offered: Fall

PHYT 5450 Foundations of PT
[2 credit hours (0, 0, 0)]
Addresses the professional socialization process. Professional codes and guides of behavior will be discussed in relation to delivery of competent, ethical, legal and compassionate PT services. Topics include: therapeutic communication, cultural competency, stress management and conflict resolution. Introduction to basic principles of teaching and learning for the role of educator is included.

Term Offered: Fall

PHYT 5610 Orientation to Interprofessional Teaming
[1 credit hour (0, 0, 1)]
Orientation to the Graduate Certificate in Teaming in Early Childhood. Focus on individual competencies needed to work collaboratively to meet the needs of young children with disabilities and their families.

Prerequisites: SPED 5270 with a minimum grade of D-

Term Offered: Summer

PHYT 5620 Leadership and Advocacy in Interprofessional Teaming
[1 credit hour (0, 0, 1)]
This second seminar in the Graduate Certificate in Teaming in Early Childhood focuses on skills and policies that promote best practices in teaming to support young children with disabilities.

Prerequisites: SPED 5270 with a minimum grade of D- and PHYT 5610 with a minimum grade of D-

Term Offered: Summer, Fall

PHYT 5630 Evidence-Based Practice and Innovation in Interprofessional Teaming
[1 credit hour (0, 0, 1)]
This third seminar in the Graduate Certificate in Teaming in Early Childhood provides students the opportunity to reflect on their practicum experiences in teaming to support young children with disabilities.

Prerequisites: SPED 5270 with a minimum grade of D- and PHYT 5610 with a minimum grade of D- and PHYT 5620 with a minimum grade of D-

Corequisites: PHYT 5640

Term Offered: Spring, Summer

PHYT 5640 Practicum in Interprofessional Teaming
[2 credit hours (0, 0, 2)]
The practicum is provides an opportunity to engage in interprofessional teaming in order to provide integrated services to young children with special needs in an inclusive setting.

Prerequisites: PHYT 5620 with a minimum grade of D-

Corequisites: PHYT 5630

Term Offered: Spring, Summer

PHYT 5650 Pharmacology of PT
[1 credit hour (0, 0, 0)]
Integrated study of pharmacology that presents the pharmacodynamics and phamacotherapeutics of common classes of drugs. Drugs covered include: anti-inflammatory, analgesic, muscle relaxant, psychotropic, anti-microbial, and diabetic medications. Emphasis on indications, contraindications, adverse drug reactions, and the implications for physical therapy care.

Term Offered: Summer

PHYT 5750 Clinical Reasoning
[1 credit hour (0, 0, 0)]
Introduction to theoretical models that guide clinical decision making, including patient management, clinical reasoning, disablement, and evidence-based practice models. Documentation will be discussed as a tool to aid clinical reasoning.

Term Offered: Fall

PHYT 5850 Integrated Clinical Experience I
[2 credit hours (0, 0, 0)]
The first of two full-time, integrated clinical education experiences. Students are engaged in clinical observation and supervised practice in a 4 week clinical education experience completed at the end of the first year of the DPT program. This course emphasizes the development of beginning skills in patient management, safety, clinical reasoning, and professional conduct in various clinical practice settings.

Term Offered: Spring

PHYT 5860 Integrated Clinical Experience II
[2 credit hours (0, 0, 0)]
Clinical observation and supervised application of advancing physical therapy skills at the same clinical facility as Clinical Practicum I. An emphasis will be on continued progression in the generic abilities and a more focused approach toward the development of specific technical, cognitive or affective areas in need of improvement as identified during Clinical Practicum I.

Term Offered: Summer

PHYT 5900 Medical Imaging
[2 credit hours (2, 0, 0)]
This course provides the student with the tools needed to interpret information obtained from the radiology report and apply it to management of the physical therapy patient. Musculoskeletal imaging is emphasized, but imaging for other body systems is also addressed. This course strengthens the student’s competency to perform a comprehensive patient evaluation, establish a diagnosis and prognosis, develop a physical therapy plan of care, and to communicate and collaborate with other health care providers.

Term Offered: Summer
PHYT 6020 Lifespan II
[2 credit hours (0, 0, 0)]
The principles of normal aging including the physiological, functional, and psychosocial changes associated with aging, and a review of diseases and disorders common to the aging population.
Term Offered: Spring

PHYT 6050 Hlth Care Policy and Delivery
[1 credit hour (0, 0, 0)]
Overview of the origins and components of the American health care system and major policy initiatives that influence it. Access, cost, and quality factors in health care delivery will be explored. Serves as a starting point for the student's study of the continuously expanding sector of the American economy in which they will practice.
Term Offered: Spring, Fall

PHYT 6010 Health Promotion
[2 credit hours (2, 0, 0)]
Discussion and application of the elements of health and wellness as described by Healthy People 2010. Emphasis on health assessment, obesity, physical activity, nutrition, complementary/alternative management, and behavior modification strategies.
Term Offered: Fall

PHYT 6170 Scholarly Project I
[2 credit hours (0, 0, 0)]
The student will initiate the formal research process through refinement of a research/scholarly project proposal and, if necessary, submission of the proposal to the Institutional Review Board for human subjects for approval.
Term Offered: Fall

PHYT 6180 Scholarly Project II
[2 credit hours (0, 0, 0)]
Includes completion of data collection, analysis of the data, and initial preparation of a scholarly paper, in accordance with specific manuscript guidelines.
Term Offered: Spring

PHYT 6190 Scholarly Project III
[1 credit hour (0, 0, 0)]
Includes the final preparation of a scholarly paper which must meet the guidelines established by the College of Graduate Studies, and the oral defense/presentation of the scholarly project as required by the College of Graduate Studies.
Term Offered: Summer, Fall

PHYT 6260 Cardiovascular-Pulmonary PT
[3 credit hours (0, 0, 0)]
Integrative study of the role of PT in interdisciplinary management of patients with cardiovascular and/or pulmonary dysfunction. Application of skills associated with PT examination, evaluation, diagnosis, prognosis and interventions for patients with CV-P dysfunction.
Term Offered: Fall

PHYT 6460 Teaching and Learning
[2 credit hours (0, 0, 0)]
Study of a physical therapist’s role as educator of peers, patients and families, community members, and students in the clinical setting. Emphasis on instructional design, instructional strategies, teaching methods, and evaluation of learning.
Term Offered: Fall

PHYT 6500 Musculoskeletal Rehab I
[3 credit hours (0, 0, 0)]
First of two courses, focused on the synthesis of principles of pathophysiology and screening and examination of musculoskeletal system. Emphasis on pertinent special examination techniques, principles of evaluation, PT diagnosis and prognosis, and intervention for the upper and lower extremities. Case-based discussion of role of common M-S pharmacological management, radiographic procedures and findings, and interpretation of special tests for diagnostic purposes.
Term Offered: Fall

PHYT 6510 Musculoskeletal Rehab II
[3 credit hours (0, 0, 0)]
Second of two courses, continued discussion of the principles of pathophysiology and musculoskeletal examination, evaluation, PT diagnosis and prognosis, and intervention. Emphasis on spine and lower quarter biomechanical examination and evaluation as it relates to lumbopelvic dysfunction. Includes discussion of: pharmacological management of inflammation and pain, and synthesis of radiological findings (radiographs, MRI, CT scans), as they relate to rendering PT diagnosis and prognosis.
Term Offered: Spring

PHYT 6600 Neuromuscular Rehab I
[3 credit hours (0, 0, 0)]
Theories and principles of client examination, evaluation, PT diagnosis, prognosis, and therapeutic intervention for clients with stroke and spinal cord injury. Historic and modern evidence-based treatment approaches for the neurologic patient, in general, will be discussed with emphasis on the approach’s influence in the design of a PT plan of care.
Term Offered: Fall

PHYT 6610 Neuromuscular Rehab II
[3 credit hours (0, 0, 0)]
Second course in the series on rehabilitation of patients with neuromuscular diagnoses, including amputations, and neurodegenerative diseases. Emphasis on theories, philosophies, and the PT plan of care including examination, evaluation, and intervention strategies. Prostheses and orthoses prescription, application and training included.
Term Offered: Spring

PHYT 6620 Pediatric Rehabilitation
[2 credit hours (0, 0, 2)]
Principles of rehabilitation for pediatric clients with neuromuscular impairments and developmental disabilities. Preparation for physical therapy practice in pediatric settings using interdisciplinary family-centered practice; normal and abnormal development, standardized assessment, service-delivery settings, interventions, management strategies specific to pediatrics. Emphasis on essential pediatric core competencies and the PT Management including examination, evaluation, diagnosis/prognosis, and intervention strategies.
Term Offered: Spring

PHYT 6700 Professional Issues
[1 credit hour (1, 0, 0)]
Prerequisite: PHYT685 Discussion of current events and issues faced by the profession of physical therapy as identified by the APTA and other pertinent sources, and as encountered during clinical education experiences.
Term Offered: Fall
PHYT 6720 Special Topics in PT
[2 credit hours (0, 0, 0)]
Intensive exploration of a topic related to the profession of physical therapy and designed to meet the student's special interest and professional goals. Subject matter will vary depending upon student interest.
**Term Offered:** Spring, Fall

PHYT 6740 Clinical Seminar I
[1 credit hour (0, 0, 0)]
First of a series of two courses, this course emphasizes the application of clinical skills learned in didactic coursework and begins to develop problem-solving and critical thinking for a variety of diagnoses and practice settings using a variety of patient scenarios. An emphasis is placed on evidence-based decision-making, basic evaluation, intervention planning, as well as beginning evaluation of one's own clinical reasoning processes and skills.
**Term Offered:** Spring

PHYT 6750 Clinical Seminar II
[1 credit hour (0, 0, 0)]
The second of a series of two courses, this course emphasizes the application of clinical skills and the integration of problem-solving and critical thinking for a variety of diagnoses and practice settings using a variety of patient scenarios. An emphasis is placed on evidence-based decision-making, comprehensive evaluation, progressive intervention planning, and evaluation of one's own clinical reasoning processes and skills.
**Term Offered:** Spring

PHYT 6850 Integrated Clinical Experience II
[5 credit hours (0, 0, 0)]
The second of two full-time, integrated clinical education experiences. Students are engaged in clinical observation and supervised practice in a 10 week clinical education experience completed at the end of the second year of the DPT program. This course emphasizes the development of intermediate skills in patient management, safety, clinical reasoning, and professional conduct in an inpatient or outpatient practice setting.
**Term Offered:** Summer

PHYT 6990 Independent Study in PT
[0-4 credit hours (0, 0, 0)]
In-depth exploration and study of clinically related problems or topic of interest. May be repeated for credit.
**Term Offered:** Spring, Summer, Fall

PHYT 7050 Practice Management
[2 credit hours (0, 0, 0)]
Examination of management and supervisory issues encountered in contemporary physical therapy practice. Discussion will include identification, analysis, and resolution of issues that compromise the delivery of effective and efficient PT services in a variety of practice settings. Topics include: organizational structure and behavior, human resources, finance and operations management, and marketing.
**Term Offered:** Spring, Fall

PHYT 7100 Integrated Patient Management
[3 credit hours (3, 0, 0)]
This integrative course emphasizes comprehensive patient management using the International Classification of Function model. This course focuses on the PT examination, evaluation, diagnosis, prognosis, and plan of care for patients with complex movement dysfunctions involving multiple body systems, managing clinical ambiguity, and determining need for referral.
**Prerequisites:** PHYT 685 with a minimum grade of D- or PHYT 6850 with a minimum grade of D-
**Term Offered:** Fall

PHYT 7200 Scholarly Project IV
[1 credit hour (0, 0, 0)]
The course includes the final preparation of a scholarly paper including the oral defense/presentation and submission of the final paper to the Department of Physical Therapy.
**Prerequisites:** PHYT 617 with a minimum grade of D- or PHYT 6170 with a minimum grade of D-
**Term Offered:** Spring, Fall

PHYT 7300 Advanced Therapeutic Exercise
[2 credit hours (1, 1, 0)]
This course will provide students with the opportunity to build upon their knowledge of principles of therapeutic exercise from previous courses and clinical education. Students will use advanced biomechanics and exercise physiology concepts to develop advanced therapeutic exercise for trunk stabilization, plyometrics, pelvic floor training, aquatic therapy, lymphedema, and sport-specific functional training. Students will further their skills in exercise dosage and progression, setting goals, and identifying most appropriate outcome measures.
**Term Offered:** Fall

PHYT 7320 Medical Screening
[1 credit hour (1, 0, 0)]
Preparation to work within a collaborative medical model and application of threshold detection to recognize to identify impairments or "red flags" in medical screening that warrant contact with a physician or other health care provider. Patient cases illustrate important medical screening principles. Emphasis on an examination scheme to promote efficient, effective patient data collection and professional communication with patients, physicians and other health providers.
**Term Offered:** Spring, Fall

PHYT 7620 Trauma Rehab
[2 credit hours (0, 0, 0)]
Integrated study of the principles of rehabilitation for clients who have sustained substantial trauma including, but not limited to: TBI, multiple fractures and burns. Students will be asked to integrate previous coursework in making decisions regarding the role of PT in the interdisciplinary management throughout the continuum of care for clients who have multi-system impairments due to physical trauma.
**Prerequisites:** Upper Division with a score of 1
**Term Offered:** Fall
PHYT 7890 Internship I  
[5 credit hours (0, 0, 5)]  
The first of two full-time, supervised internships completed following the culmination of the didactic portion of the DPT program. Students are engaged in supervised practice in a 10 week internship that emphasizes development toward entry-level PT competencies in all the components of professional practice and patient management in an inpatient or outpatient practice setting.  
**Term Offered:** Spring, Fall

PHYT 7900 Internship II  
[6 credit hours (0, 0, 0)]  
The final full-time, supervised internship completed following the culmination of the didactic portion of the DPT program. Students are engaged in supervised practice in a 12 week internship that emphasizes development of entry-level PT competencies in all the components of professional practice and patient management in various clinical practice and specialty settings.  
**Term Offered:** Spring

PHYT 7990 Specialty Internship  
[4 credit hours (0, 0, 0)]  
Extended period of supervised, advanced clinical practice and/or formal experience in administrative or professional organizational environments, which is designed to meet the student’s special interests and professional goals.  
**Term Offered:** Spring, Fall