

# PHYSICAL THERAPY

Chair	Secretary	Location	Department Phone
Dr. Mary Ann Holbein-Jenny	Kelly Greer	204 Physical Therapy Building	724-738-2080

## Graduate Coordinator

Dr. Kelly Lindenberg

The GSPT at SRU will prepare physical therapists who demonstrate competent, ethical, evidenced-based practice and professional behaviors in a dynamic health care environment. The graduates will be lifelong learners who serve the health care needs of consumers and a global society while contributing to the advancement of the profession.

## Faculty

### **Barbara Billek-Sawhney**

Professor  
School of Physical Therapy  
Ed.D., Duquesne University  
B.S., University of Pittsburgh  
M.S., University of Pittsburgh

### **Nuket Curran**

Instructor  
School of Physical Therapy

### **James Eng**

Associate Professor  
School of Physical Therapy  
D.P.T., University of Pittsburgh  
M.S., University of Pittsburgh  
B.S., State University of New York at Stony Brook  
B.A., University of Pittsburgh

### **Joseph Fiedor**

Associate Professor  
School of Physical Therapy  
M.S., Clarion University  
M.B.A., Clarion University  
B.S., Clarion University

### **Carole Galletta**

School of Physical Therapy  
M.P.H., University of Minnesota  
B.S., University of Pittsburgh

### **Maryann Holbein-Jenny**

Professor  
School of Physical Therapy  
Ph.D., University of Pittsburgh  
M.S., University of Pittsburgh  
B.S., University of Pittsburgh

### **Christopher Hughes**

Professor  
School of Physical Therapy  
Ph.D., University of Virginia  
M.S., Springfield College  
B.S., Springfield College

### **Kelly Lindenberg**

Associate Professor  
School of Physical Therapy  
Ph.D., Duquesne University  
M.S., College Misericordia  
B.S., College Misericordia

### **Ian Shadle**

Instructor  
School of Physical Therapy

### **Nancy Shipe**

Associate Professor  
School of Physical Therapy  
D.P.T., MGH Institution of Health Professionals  
M.S., University of Pittsburgh  
B.S., University of Pittsburgh

### **Timothy Smith**

Professor  
School of Physical Therapy  
Ph.D., University of Pittsburgh  
M.A., University of Pittsburgh  
B.F.A., Carnegie-Mellon University

### **Stephanie Young**

Instructor  
School of Physical Therapy

## Programs

### Majors

- Physical Therapy, Doctor of Physical Therapy (DPT) (<https://catalog.sru.edu/graduate/health-engineering-sciences/physical-therapy/physical-therapy-dpt/>)

## Courses

### **PHTH 545 - Health Care Systems I**

The purpose of this course is to introduce the student to the historical development, structure and function of the American health care system and the profession of physical therapy. The elements of patient management as described in the APTA Guide to Physical Therapy Practice and a model of displacement will be used as a framework to introduce patient management across various practice settings.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms  
Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.  
Enrollment is limited to Graduate or Undergraduate level students.

### **PHTH 590 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed  
Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.  
Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 591 - Technology in Physical Therapy (TDPT)**

This course introduces the student to current technology that is available and influences the profession of physical therapy. Topics include literature searches, management software, virtual reality, and how to critically evaluate technology.

Credits: 1

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 592 - Evidence-Based Practice (TDPT)**

The course will emphasize Sackett's model of evidence-based medicine. Students will learn how to critically evaluate medical literature. Students will be required to perform literature searches, read, interpret, critique and apply current research to clinical practice to provide a rationale for practice.

Credits: 2

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 593 - Differential Diagnosis (TDPT)**

Whether physical therapists practice under increasingly prevalent direct access laws or practice by physician referral, their ability to recognize systemic disease is critical. This course will prepare physical therapists to recognize signs and symptoms of systemic disease and make appropriate medical referrals.

Credits: 2

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 595 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 598 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate or Undergraduate level students.

**PHTH 631 - Neuroscience I**

This course is primarily a study of the development of the human nervous system, the morphology, classification and basic physiology of neurons, and the neuroanatomy of the brain and spinal cord. It provides a basic foundation of knowledge regarding the essential concepts of neuroscience with a focus on the basic physiology and 3-dimensional anatomy of the central nervous system.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate level students.

**PHTH 636 - Neuroscience II**

This course builds upon the basic neuroscience foundation provided in Neuroscience I (PHTH 631). A systems approach is utilized to examine structure and function of the clinically relevant systems of the peripheral and central nervous systems as applied to neurological evaluation. An introduction to basic neurological physical examination methods is included.

Prerequisite: PHTH 631<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate level students.

**PHTH 645 - Clinical Experience I**

The purpose of this course is to provide students with first hand knowledge of the multi-faceted role of the profession of physical therapy through an introductory two-week full-time clinical experience. Students will have the opportunity to practice basic examination and intervention skills under the direct supervision of a licensed physical therapist.

Prerequisites: PHTH 545<sup>C</sup> and PHTH 630<sup>C</sup> and PHTH 635<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate level students.

**PHTH 650 - PT Modalities**

This course focuses on the theory and physiological effects of selected instrumentation with indications and contraindications relevant to specific problems. Therapeutic modalities include: heat, cold, electrical current, light, sound, intermittent compression and traction. In addition, the American Physical Therapy Association's Guide will be reviewed relative to physical therapy modality practice.

Prerequisite: PHTH 540<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate level students.

**PHTH 652 - Nutrition**

This course provides the student with an introduction and application of the science of nutrition. Emphasis is placed on an understanding of the various nutrients, their functions and availability as well as a realistic means by which to obtain them in the diet. Implications for the physical therapist will be addressed.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs. Enrollment is limited to Graduate level students.

**PHTH 653 - Pharmacotherapy**

This course introduces students to medications, their appropriate uses, side effects, interactions and adverse effects. Emphasis is placed on an understanding of medication effects as they relate to a patient's progress in physical therapy. The course content will encompass all age groups, but special emphasis will be placed on adolescent, adult and older adults.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 654 - Pathology I**

This course examines dysfunction of the body at the cellular, tissue, organ and system levels. This course will include an introduction to microanatomy and histopathology. special emphasis will be placed on the etiology of disease states and disorders that are commonly encountered by physical therapists practicing in various clinical settings.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

**PHTH 655 - Pathology II**

This course examines dysfunction of the body at the cellular, tissue, organ and system levels. this course will include an introduction to microanatomy and histopathology. Special emphasis will be placed on the etiology of disease states and disorders that are commonly encountered by physical therapists practicing in various clinical settings.

Prerequisite: PHTH 654<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

**PHTH 656 - Gross and Applied Anatomy I**

This is the first of two anatomy and movement science courses, and focuses on the anatomy of the upper and lower limbs. The course includes full cadaver dissection as well as a discussion of anatomical structures from developmental and functional perspectives. Biomechanics of the body will be discussed, in parallel with regional focus of dissection.

Credits: 6

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

**PHTH 658 - Gross and Applied Anatomy II**

This is the second of two anatomy and movement science courses and focuses on the anatomy of the head, neck, deep back, spinal column and body cavities. The course includes full cadaver dissection as well as a discussion of anatomical structures from developmental and functional perspectives. In this course, biomechanics of the axis and gait will be discussed.

Prerequisite: PHTH 656<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 6

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

**PHTH 659 - PT Assessment and Procedures I/Lab**

This course is an introductory clinical skills course that introduces the student to the American Physical Therapy Association's Guide to Physical Therapist Practice approach to physical therapy practice and documentation, body mechanics, positioning and draping, infection control, basic range of motion exercise, manual muscle testing, goniometry, reflex assessment, sensory testing, assessment of soft tissue and barriers to motion especially as applied to the appendicular skeleton.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

**PHTH 660 - PT Assessment and Procedures II**

This course is a clinical skills course that further develops the knowledge and skills in manual muscle testing, goniometry, reflexes, sensory testing, assessment of soft tissue and barriers to motion applied to the axial skeleton. it also focuses on introductory clinical skills such as vital signs clinical emergencies, basic wheelchair prescription, transfers, bed mobility and gait training.

Prerequisite: PHTH 659<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Students in the DPT 9D6C or DPT 9D6D programs may **not** enroll.

**PHTH 661 - Environmental Considerations for Physical Therapists**

This 2 credit course addresses the role and responsibilities of the physical therapist in environmental assessment and implementation of strategies to improve client/patient function at home, school, work and community.

Prerequisites: PHTH 545<sup>C</sup> and PHTH 659<sup>C</sup> and PHTH 660<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 690 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 695 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 698 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Prerequisites: PHTH 630<sup>C</sup> and PHTH 635<sup>C</sup> and PHTH 702<sup>C</sup> and PHTH 703<sup>C</sup> and PHTH 719<sup>C</sup> and PHTH 717<sup>C</sup> and PHTH 718<sup>C</sup> and PHTH 729<sup>C</sup> and PHTH 732<sup>C</sup> and PHTH 733<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 699 - Current Concepts in Rehabilitation (TDPT)**

This course focuses on current concepts in rehabilitation including motor control, motor learning, medical monitoring, strengthening, stretching, motor control, spasticity, and functional retraining.

Credits: 2

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 700 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 702 - Musculoskeletal: Upper Extremity**

This is the first of three sequential courses that focuses on the physical therapy patient/client management model applied to the musculoskeletal practice pattern with emphasis on the upper extremity.

Prerequisites: PHTH 659 (may be taken concurrently)<sup>C</sup> and PHTH 660<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 703 - Musculoskeletal: Spine**

This is the second of three sequential courses that focuses on the physical therapy patient/client management model applied to the musculoskeletal practice pattern with emphasis on the temporomandibular joint, spine, and sacroiliac joint.

Prerequisites: PHTH 702<sup>C</sup> or PHTH 704<sup>P</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>P</sup> Requires minimum grade of P.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 704 - Musculoskeletal: Lower Extremity**

This is the third of three sequential courses that focuses on the physical therapy patient/client management model applied to the musculoskeletal practice pattern with emphasis on the lower extremity.

Prerequisites: PHTH 659<sup>C</sup> and PHTH 660<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 710 - Clinical Experience II**

The purpose of this course is to provide students with the opportunity for professional development through a five-week full-time clinical experience. Students will have the opportunity to practice basic patient/client management skills under the direct supervision of a licensed physical therapist.

Prerequisites: PHTH 645<sup>P</sup> and PHTH 702<sup>\*C</sup> and PHTH 717<sup>\*C</sup> (may be taken concurrently).

<sup>P</sup> Requires minimum grade of P.

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 717 - Neuromuscular I**

This is the first of two sequential courses on neuromuscular physical therapy in which the students is required to integrate material from prior physical therapy coursework. This course focuses on the examination of patients with neuromuscular dysfunction and the differential process. Emphasis will be placed on rehabilitation of the patient with hemiparesis due to stroke. Practical application of appropriate interventions will be introduced with an emphasis on motor learning, balance, transfers, bed mobility and gait.

Prerequisites: PHTH 636<sup>C</sup> and PHTH 660<sup>C</sup> and PHTH 658<sup>C</sup> and PHTH 702<sup>\*C</sup> and PHTH 719<sup>\*C</sup> and PHTH 729<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 4

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 718 - Neuromuscular II**

This is the second of two sequential courses on neuromuscular physical therapy in which the student is required to integrate material from prior PT coursework. This course focuses on the examination of patients with neuromuscular dysfunction and interventions for specific diagnoses, which include brain injury, concussion, multiple sclerosis, vestibular dysfunction, cerebellar disorders, amyotrophic lateral sclerosis and spinal cord injury.

Prerequisites: PHTH 702<sup>C</sup> and PHTH 710<sup>P</sup> and PHTH 717<sup>C</sup> and PHTH 719<sup>C</sup> and PHTH 729<sup>C</sup> and PHTH 732<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

<sup>P</sup> Requires minimum grade of P.

Credits: 4

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 719 - Therapeutic Adaptations with Lab**

This three credit lecture and laboratory based course focuses on orthoses, prostheses, assistive technology, adaptive equipment, and environmental assessment and modifications.

Prerequisites: PHTH 636<sup>C</sup> and PHTH 658<sup>C</sup> and PHTH 660<sup>C</sup> and PHTH 717<sup>\*C</sup> and PHTH 729<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 729 - Foundations of Therapeutic Exercise/Lab**

Therapeutic Exercise will include information relative for creating, analyzing, modifying, and progression of activity training regimens utilized throughout rehabilitation. Students will learn how to manage individualized and group therapeutic exercise programs; determine the precautions, indications, and contraindications of various techniques; identify common conditions where therapeutic strategies are employed.

Emphasis is placed on clinical application of muscle strengthening, stretching, conditioning, and aquatic therapy. Principles of exercise prescription will be discussed.

Prerequisites: PHTH 659<sup>C</sup> and PHTH 660<sup>C</sup> and PHTH 658<sup>C</sup> and PHTH 655<sup>C</sup> and PHTH 636<sup>C</sup> and PHTH 645<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 731 - Diagnostic Imaging for PTs**

This course focuses on the study of the principles, procedures, and interpretation of diagnostic imaging techniques. Emphasis is placed on plain film radiography, myelograms, CT scans, medical resonance imaging and nuclear medicine as they relate to the musculoskeletal, cardiovascular, gastrointestinal and reproductive systems.

Prerequisites: PHTH 548<sup>C</sup> and PHTH 630<sup>C</sup> and PHTH 635<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 732 - Cardiopulmonary**

Cardiopulmonary Physical Therapy is a lecture and laboratory course focusing on the fundamental components of cardiopulmonary physical therapy for entry-level physical therapists. Concepts of exercise physiology and practical application in cardiopulmonary physical therapy are addressed. Emphasis is placed on clinical application of cardiac and pulmonary rehabilitation and management of patients during critical illnesses and integration of pathophysiology, anatomy, and pharmacotherapy.

Prerequisites: PHTH 651<sup>C</sup> and PHTH 635<sup>C</sup> and PHTH 549<sup>C</sup> and PHTH 729<sup>C</sup> and PHTH 653<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 733 - Integumentary PT**

This course will focus on integumentary physical therapy and the patient/client management model. The course will encompass burns and wounds with emphasis on differential diagnosis, burn/wound examination, evaluation, diagnosis, prognosis, and intervention.

Prerequisites: PHTH 630<sup>C</sup> and PHTH 635<sup>C</sup> and PHTH 548<sup>C</sup> and PHTH 549<sup>C</sup> and PHTH 702<sup>C</sup> and PHTH 653<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 734 - Geriatric PT**

This course is designed to prepare physical therapists to work effectively with the older adult in a variety of settings. The emphasis is placed on examination, treatment, and interactions with individuals after middle-age. Laboratory sessions complement lectures.

Prerequisites: PHTH 704<sup>C</sup> and PHTH 718<sup>C</sup> and PHTH 732<sup>C</sup> and PHTH 719<sup>C</sup> and PHTH 729<sup>C</sup> and PHTH 733<sup>\*C</sup> and PHTH 653<sup>C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 735 - Pediatric PT**

This course is designed to prepare physical therapists to apply the patient/client management model to the pediatric population. Emphasis is placed on typical and atypical growth and development of the major body systems and developmental disorders.

Prerequisites: PHTH 702<sup>C</sup> and PHTH 703<sup>C</sup> and PHTH 704<sup>C</sup> and PHTH 717<sup>C</sup> and PHTH 718<sup>C</sup> and PHTH 732<sup>C</sup> and PHTH 733<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 736 - Special Topics in PT**

Special Topics is a one credit course focusing on women's health, labor and delivery, breast cancer, lymphedema, incontinence, bariatrics, and oncology. Through case studies this course explores niche practice arenas.

Prerequisites: PHTH 732<sup>C</sup> and PHTH 733<sup>C</sup> and PHTH 743<sup>C</sup> and PHTH 734<sup>\*C</sup> (may be taken concurrently).

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 737 - Physical Therapy Business Practices**

This two-credit course focuses on business practices in physical therapy. Emphasis is placed on direction, delegation and supervision, jurisdictional law, documentation, risk management, human resources, financial management, marketing and public relations, regulatory and legal requirements, and professional advocacy. The student will work on preparing for entering the job market. In small groups, establish a business plan on a programmatic level within a practice.

Prerequisites: PHTH 710<sup>P</sup> and PHTH 742<sup>C</sup>

<sup>P</sup> Requires minimum grade of P.

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 742 - Health Care Systems II**

This course encompasses communication, ethics and legal issues that affect the profession of physical therapy. Communication will focus on interactions with patients, clients, family, colleagues, and other members of the health care team with emphasis on cultural sensitivity.

Prerequisite: PHTH 545<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 743 - Education, Prevention, and Wellness**

This course focuses on the role of the physical therapist in the areas of education, prevention, and practice. Emphasis is placed on authentic assessment and application of knowledge through the development of patient educational materials, professional educational presentation, behavioral change, theory and practice related to patient education.

Prerequisite: PHTH 710<sup>P</sup>

<sup>P</sup> Requires minimum grade of P.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 744 - Psychosocial integration**

This course introduces psychosocial concepts related to the role of the physical therapist in caring for individuals experiencing acute, chronic and terminal illness. Explores the relationships and interactions between patients and society with respect to physical disability and disease. Lecture discussion, independent reading and experimental learning are employed to investigate self-awareness, interpersonal communication, problem solving, stress management, coping mechanisms and motivation.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 751 - Electroneuromyography**

This course provides an overview of the anatomical and neurophysiological foundations, basic principles, and common techniques associated with electrophysiologic evaluation of the peripheral nervous system utilizing electromyography (EMG) and nerve conduction studies (NCS). Emphasis is placed on developing the student's skills in correlating patient history and clinical examination findings used in formulation of differential working diagnoses with EMG/ NCS findings in the evaluation of the differential diagnoses.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 752 - Pediatric Elective**

This course expands on the material presented in Pediatric PT (PHTH 735). Emphasis is placed on the following topics: assessment, cognitive development, the high risk infant, adaptive equipment for the physically challenged, physical therapy in the school setting, special topics, issues and concerns of parents with children with disabilities, maturation of the child with disabilities into adulthood.

Prerequisites: PHTH 646<sup>C</sup> and PHTH 702<sup>C</sup> and PHTH 703<sup>C</sup> and PHTH 704<sup>C</sup> and PHTH 717<sup>C</sup> and PHTH 718<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 754 - Sports PT**

This course focuses on the evaluation and management of athletic injuries. Emphasis is placed on the physical therapy diagnosis for acute and overuse injuries to the musculoskeletal system, and the recognition and on-site care of life-threatening conditions and injuries to the head and spinal column.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 755 - Geriatric Elective**

Geriatrics focuses on the study of all aspects of aging: biological, psychological, and social. The study of diseases in the elderly and rehabilitation of older adult are emphasized.

Prerequisites: PHTH 702<sup>C</sup> and PHTH 703<sup>C</sup> and PHTH 717<sup>C</sup> and PHTH 718<sup>C</sup> and PHTH 719<sup>C</sup> and PHTH 729<sup>C</sup> and PHTH 732<sup>C</sup> and PHTH 733<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 756 - Complementary and Alternative Medicine in PT**

The growth in complementary and alternative treatments is rapid in all areas of health care especially physical therapy. Complementary and Alternative Medicine in Physical Therapy will introduce students to various interventions such as myofascial release, cranial-sacral, Reiki, Pilates, t'ai chi chuan and qigong, aquatic therapy and other interventions. This course will complement the entry-level DPT curriculum.

Prerequisite: PHTH 646<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 757 - Concepts of Evidence-Based Practice**

This course will introduce the evidence-based practice process and emphasize formulating focused clinical questions and searching the literature for various levels of evidence for all aspects of physical therapy practice. Emphasis will also be placed on basic concepts of measurement and critical analysis of literature.

Credits: 2

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 758 - Evidence-based Practice: Appraising the Literature with Lab**

This course is designed to develop skill in identifying appropriate research designs and analysis for each element of the patient/client management model (diagnosis and screening, prognosis, intervention, outcome) and in critically appraising various levels of evidence for all elements. Students will contribute to the evidence for practice for by writing a critical appraisal of an element of patient care

Prerequisite: PHTH 757<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 759 - Evidence-based Practice Application**

This is the final course in the evidence-based practice series. Emphasis is placed on synthesizing skills from the various phases of evidence-based practice and self-assessing utilization of the evidence-based practice process. Students will complete a project that includes formulating and answering an original clinical question, using multiple sources of evidence, and then deliver a formal presentation of their work.

Prerequisite: PHTH 758<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 760 - Case-Based Research Project (TDPT)**

This course will enable the student to be able to conduct case-based research in a clinical environment using appropriate research designs and statistical procedures. The course may be repeated once for one additional credit.

Credits: 1

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 790 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Graduate.

**PHTH 795 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**PHTH 798 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**PHTH 802 - Clinical Internship I**

The purpose of this course is to provide students with the opportunity for further professional development through a 15-week full-time clinical internship. Students will have the opportunity for experience in all aspects of patient/client management under the direct supervision of a licensed physical therapist in one or more clinical settings.

Prerequisites: PHTH 548<sup>C</sup> and PHTH 549<sup>C</sup> and PHTH 645<sup>P</sup> and PHTH 652<sup>C</sup> and PHTH 653<sup>C</sup> and PHTH 710<sup>P</sup> and PHTH 743<sup>C</sup> and PHTH 744<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>P</sup> Requires minimum grade of P.

Credits: 9

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 804 - Clinical Internship II**

The purpose of this final clinical education course is to provide students with the opportunity for further professional development through a 15-week full-time clinical internship. Students will have the opportunity for experience in all aspects of patient/client management under the direct supervision of a licensed physical therapist in one or more clinical settings.

Prerequisites: PHTH 548<sup>C</sup> and PHTH 549<sup>C</sup> and PHTH 652<sup>C</sup> and PHTH 653<sup>C</sup> and PHTH 743<sup>C</sup> and PHTH 744<sup>C</sup> and PHTH 645<sup>P</sup> and PHTH 710<sup>P</sup> and PHTH 802<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

<sup>P</sup> Requires minimum grade of P.

Credits: 9

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 816 - Professional Exploration I**

The purpose of this course is to provide the students with the opportunity to develop a project that will allow them to explore one of several physical therapy specialty areas such as clinical practice, education, research, administration, their professional organization and service learning.

This course will allow the students to plan their exploratory project, write objectives and find a mentor for their project. The project will then be implemented the following semester in Professional Exploration II (66-819).

Credits: 1

Term(s) Typically Offered: Offered Summer Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 819 - Professional Exploration II**

Professional Exploration II is the second course in the Professional Exploration sequence. This course will allow the student to implement the project he/she developed in Professional Exploration I (PHTH 816).

The student will work closely with their mentor to accomplish the outcome objectives for their selected specialty area.

Prerequisite: PHTH 816<sup>C</sup>

<sup>C</sup> Requires minimum grade of C.

Credits: 1

Term(s) Typically Offered: Offered Fall Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 820 - Professional Inquiry**

Professional Inquiry is the final course in the PT curriculum in which emphasis is placed on various areas of physical therapy practice. Presentations are scheduled based on student and faculty-identified interests.

Credits: 2

Term(s) Typically Offered: Offered Spring Terms

Enrollment limited to students in the DPT 9D6C or DPT 9D6D programs.

Enrollment is limited to Graduate level students.

**PHTH 890 - Experimental**

A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment limited to students with a semester level of Graduate.

**PHTH 895 - Workshop**

A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**PHTH 897 - Independent Study**

Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.

**PHTH 898 - Selected Topics**

A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: Offered as Needed

Enrollment is limited to Graduate level students.