



UNIVERSITY OF DELAWARE

## HEALTH SCIENCES

### Doctor of Physical Therapy Curriculum

#### Year 1 - Second Summer (8 weeks)

Course Number	Title	Credits
PHYT 600	P.T. as a Profession	2
PHYT 622	Clinical Gross Anatomy	6
		<b>Semester Total: 8</b>

#### Year 1 - Fall

Course Number	Title	Credits
PHYT 604	Functional Anatomy & Biomechanics	4
PHYT 624	Basic Evaluation Techniques	2
PHYT 631	P.T. in the Acute Care Environment	5
PHYT 635	Thermal Agents and Soft Tissue	2
PHYT 641	Rounds I	1
PHYT 801	Medical Science I – General Medicine	3
		<b>Semester Total: 17</b>

#### Year 1 - Winter

Course Number	Title	Credits
PHYT 620	Educational Process in Community Health	1
PHYT 632	Applied Physiology I	3
PHYT 830	Introduction to Clinical Education	1
PHYT 626 (Optional)	Advanced Regional Anatomy	(3)**
		<b>Semester Total: 5-8</b>

**\*\*Optional - May be taken**

#### Year 1 - Spring

Course Number	Title	Credits
PHYT 606	Research	3
PHYT 623	Clinical Neuroscience	4
PHYT 633	Applied Physiology II	2
PHYT 634	Electrotherapy	3
PHYT 642	Rounds II	Credit in Fall Year 1
PHYT 821	Sports/Ortho Integrated Clinical Experience	(3)*
PHYT 822	Neurologic/Older Adult Integrated Clinical Experience	(3)*
		<b>Semester Total: 12-15</b>

**\*One of these may be assigned**

**Year 2 - Summer (10 weeks)**

Course Number	Title	Credits
PHYT 608	Musculoskeletal Evaluation & Treatment	5
PHYT 802	Medical Science II – Orthopedics	3
PHYT 807	Advanced Topics in Physical Therapy	5
PHYT 812	Pediatrics Integrated Clinical Experience	(1)*
PHYT 821	Sports/Ortho Integrated Clinical Experience	(3)*
PHYT 822	Neurologic/Older Adult Integrated Clinical Experience	(3)*
		<b>Semester Total: 13-16</b>

**\*One of these may be assigned**

**Year 2 - Fall**

Course Number	Title	Credits
PHYT 643	Rounds III	1
PHYT 803	Medical Science III - Neurology	3
PHYT 804	Neurophysiologic Evaluation & Treatment	4
PHYT 805	Rehabilitation	4
PHYT 808	Spine Management	5
PHYT 621 (Optional)	Musculoskeletal Ultrasound Imaging	(3)**
PHYT 812	Pediatrics Integrated Clinical Experience	(1)*
PHYT 821	Sports/Ortho Integrated Clinical Experience	(3)*
PHYT 822	Neurologic/Older Adult Integrated Clinical Experience	(3)*
		<b>Semester Total: 17-23</b>

**\*One of these may be assigned**

**\*\*Optional - May be taken**

**Year 2 - Winter**

Course Number	Title	Credits
PHYT 626 (Optional)	Advanced Regional Anatomy	(3)**
PHYT 809	Psychosocial Aspects of Health and Disease	3
PHYT 810	Clinical Management and Administration	2
PHYT 812	Pediatric Integrated Clinical Experience	(1)*
		<b>Semester Total: 5-9</b>

**\*May be assigned**

**\*\*Optional - May be taken**

**Year 2 – Spring – Shortened Semester (12 weeks)**

Course Number	Title	Credits
PHYT 614 (Optional)	Sports Physical Therapy	(variable 1-3)**
PHYT 644	Rounds IV	Credit in Fall Year 2
PHYT 806	Geriatrics	3
PHYT 811	Pediatrics	4
PHYT 812	Pediatric Integrated Clinical Experience	(1)*
PHYT 821	Sports/Ortho Integrated Clinical Experience	(3)*
PHYT 822	Neurologic/Older Adult Integrated Clinical Experience	(3)*
		<b>Semester Total: 7-13</b>

**\*One of these may be assigned**

**\*\*Optional – May be taken**

**Year 3 - Summer I (10 weeks)**

<b>Course Number</b>	<b>Title</b>	<b>Credits</b>
PHYT 831	Full-time Clinical Experience – Inpatient <b>OR</b>	4
PHYT 833	Full-time Clinical Experience – Outpatient <b>OR</b>	4
PHYT 834	Full-time Clinical Experience - Elective	4
		<b>Semester Total: 4</b>

**Year 3 - Summer II (10 weeks)**

<b>Course Number</b>	<b>Title</b>	<b>Credits</b>
PHYT 831	Full-time Clinical Experience – Inpatient <b>OR</b>	4
PHYT 833	Full-time Clinical Experience – Outpatient <b>OR</b>	4
PHYT 834	Full-time Clinical Experience - Elective	4
		<b>Semester Total: 4</b>

**Year 3 – Fall (10 weeks)**

<b>Course Number</b>	<b>Title</b>	<b>Credits</b>
PHYT 831	Full-time Clinical Experience – Inpatient <b>OR</b>	4
PHYT 833	Full-time Clinical Experience – Outpatient <b>OR</b>	4
PHYT 834	Full-time Clinical Experience - Elective	4
		<b>Semester Total: 4</b>

**TOTAL CREDITS = 103**

\*Each of these courses will be taken once. Assignments are coordinated by the Clinical Education Team.

<b>PHYT 812</b>	<b>Pediatric Integrated Clinical Experience</b>	<b>1 credit</b>
<b>PHYT 821</b>	<b>Sports/Ortho Integrated Clinical Experience</b>	<b>3 credits</b>
<b>PHYT 822</b>	<b>Neurologic/Older Adult Integrated Clinical Experience</b>	<b>3 credits</b>

\*\*Optional Electives – courses do not count toward total required hours for degree.

<b>PHYT 614</b>	<b>Sports Physical Therapy</b>	<b>Variable 1-3 credits</b>
<b>PHYT 626</b>	<b>Advanced Regional Anatomy</b>	<b>3 credits</b>
<b>PHYT 621</b>	<b>Musculoskeletal Ultrasound Imaging</b>	<b>3 credits</b>

Spring 2023

**PHYSICAL THERAPY PROGRAM COURSE DESCRIPTIONS****PHYT 600: PT as a Profession (2 credits, pass/fail)**

The practice of physical therapy will be explored through the use of guiding documents from the professional association and law and regulations governing practice. The concepts embedded within the Code of Ethics, Standards of Practice, and Core Values will be analyzed, toward a conceptualization of the profession's direction and needs. Formal and informal activities will guide the student's learning in the area of professional development throughout the duration of the academic program, including simulations, career fairs, interprofessional work, service learning, and reflective writing.

**PHYT 622: Clinical Gross Anatomy (6 credits)**

Structural and functional aspects of regions of body under study are emphasized by means of human cadaver, lectures, and demonstrations. Clinical significance of anatomical structure is stressed.

**PHYT 641: Rounds I – Year 1 (1 credit)****PHYT 643: Rounds III – Year 2 (1 credit)**

Clinical cases presented by faculty, clinical faculty, doctoral students, PT residents and DPT students in Grand Rounds format for discussion by all students in the physical therapy graduate program.

**PHYT 604: Functional Anatomy and Biomechanics (4 credits)**

Gives a description of normal and abnormal human movement. Emphasis on joint structure and function and gait using arthrokinematic and osteokinematic analysis. Evaluation procedures such as EMG, cinematography and computer simulations utilized.

**PHYT 624: Basic Evaluation Techniques (2 credits)**

Provides an understanding of the philosophy and practice of patient evaluation and physical therapy diagnosis. Muscle performance testing and measurement of joint motion will be emphasized.

**PHYT 631: Physical Therapy in the Acute Care Environment (5 credits)**

Presents diagnoses commonly seen in the acute care environment. The pathological, anatomical, evaluation, documentation and treatment considerations in managing these diagnoses are discussed.

**PHYT 635: Thermal Agents and Soft Tissue Techniques (2 credits)**

An introduction to evidence-supported thermal modalities and soft tissue mobilization techniques commonly used in physical therapy practice. Teachings will further highlight the complexities of pain and the associated role of the physical therapist.

**PHYT 801: Medical Science I - General Medicine (3 credits)**

Lectures in pathology, clinical medicine, pharmacology, and differential diagnosis across the lifespan. Implications for physical therapy are emphasized.

**PHYT 620: Educational Process in Community Health (1 credit)**

The learning/teaching process as defined in the Guide to Physical Therapy Practice is the focus of this course. Topics covered include principles of adult learning, basic learning theory, communication, culturally sensitive care and motivational techniques to promote learning and carryover.

**PHYT 632: Applied Physiology I (3 credits)**

Lectures provide in-depth analysis of the physiological mechanisms of the cardio-pulmonary system, with specific emphasis on abnormal function given various pathologies. Evaluative tests and measures, treatment interventions, and documentation are discussed and practiced through comprehensive case studies.

**PHYT 830: Introduction to Clinical Education (1 credit, pass/fail)**

This course is designed to prepare students for academic progression into their clinical affiliations. Prior to a student starting a clinical affiliation, he/she/they is required to cover a number of clinically relevant topics. Upon completing this course, students will be given the knowledge and skills necessary to prevent, recognize, and provide care for sudden cardiac or respiratory distress. They will learn the current federal laws in place to protect an individual's privacy in the medical setting. Other topics of interest include understanding how to handle infectious and hazardous materials, and understanding the process of state required background checks to protect the public in positions of sensitivity. The class will consist of lectures and labs to complete the objectives of the course.

**PHYT 626: Advanced Regional Anatomy (Elective, 3 credits)**

Structural and functional aspects of regions of the body under study are emphasized by means of a dissection of a specific region of the human body.

**PHYT 606: Research (3 credits)**

An overview of methodological issues in the conduct of physical therapy research to prepare students to become consumers of clinical literature. Topics include ethics in human subject research, scientific method, experimental design, statistical procedures and use of social media to help follow the literature. Students successfully completing the class will have the ability to critically appraise the clinical research literature and appropriately use study findings to refine and improve their clinical practice.

**PHYT 623: Clinical Neuroscience (4 credits)**

A study of the structure and function of the human nervous system with major emphasis on the cause-effect relationships between lesions and their symptoms. Emphasis on the neural mechanisms controlling movement.

**PHYT 633: Applied Physiology II (2 credits)**

Discusses the research on the effects of exercise on the various patient populations (not including cardiopulmonary). Emphasis placed on the musculoskeletal system and on exercise prescription and progression.

**PHYT 634: Electrotherapy (3 credits)**

Provides an understanding of the physiological basis for the use of physical agents and electrotherapy. Emphasis placed on patient evaluation and clinical applications of modalities used in physical therapy clinics.

**PHYT 608: Musculoskeletal Evaluation and Treatment (5 credits)**

Evaluation and treatment of musculoskeletal conditions of the extremities. Emphasizes research on the physiological basis of immobilization and remobilization. The diagnoses, prognosis, treatment, consultation and basis for referral of orthopedic and musculoskeletal disorders is examined. Includes joint mobilization and thrust manipulation.

**PHYT 802: Medical Sciences II – Orthopedics & Musculoskeletal Imaging (3 credits)**

Orthopedic pathology, medical and surgical management of musculoskeletal conditions across the lifespan with implications for physical therapy intervention. Includes musculoskeletal imaging and pharmacology.

**PHYT 807: Advanced Topics in Physical Therapy (5 credits)**

Lecture and laboratory opportunities build knowledge and skill in diverse specialty areas of physical therapy (including wound care and women's health). Students also receive practical training in managing emergency situations as a first responder and further develop competencies required for interprofessional practice.

**PHYT 803: Medical Science III - Neurology (3 credits)**

Lectures of basic principles of neurology throughout the lifespan. Emphasis placed on medical principles related to diseases most frequently encountered in physical therapy practice.

**PHYT 804: Neurophysiologic Evaluation & Treatment (4 credits)**

Basic evaluation and treatment methods for managing patients with neurological dysfunctions. Analysis of these methods in light of current issues and theories of motor control, motor learning and neurobehavioral plasticity. Emphasis on learning strategies for treatment rather than through details of specific approaches.

**PHYT 805: Rehabilitation (4 credits)**

Rehab 805 presents the theory and skills needed for the management of patients commonly seen in inpatient and outpatient rehabilitation settings. Instructors and guest lecturers are experts in the evaluation and program planning of patients in their area of interest. This course involves lecture and lab components. Site visits and direct interaction with patients is included. This is a team taught course. As such, instructors and lecturers have freedom to organize their sections to best fit their expertise and the clinical environment as they view it. Students should anticipate different teaching styles and slightly different levels of expectations from each section. Students are highly encouraged to ask questions and engage in discussion.

**PHYT 808: Spine Management (5 credits)**

Discusses the biomechanics, pathophysiology and disability associated with spine pain and dysfunction. Includes an understanding of the role of physical therapy evaluation in the determination and implementation of physical therapy interventions.

**PHYT 621: Musculoskeletal Ultrasound Imaging in Clinical Practice & Research (Elective, 3 credits)**

The course covers musculoskeletal ultrasound imaging physics, principles, patient safety, indications, knobology, and artifact identification. Fundamentals of musculoskeletal ultrasound imaging of the trunk (e.g. low back, anterior trunk, pelvic floor) and major peripheral joints (e.g. hip, knee, ankle, foot, shoulder, elbow, wrist, hand) are demonstrated and practiced. Applications of ultrasound imaging in healthcare practice and research are discussed and demonstrated.

**PHYT 809: Psychosocial Aspects of Health and Disease (3 credits)**

Discusses the psychosocial characteristics of patient populations and therapists that impact on the rehabilitation process. Death and dying, social implications of illness diagnosis and other topics are discussed.

**PHYT 810: Clinical Management and Administration (2 credits)**

Discusses concepts of administration and issues in the management of hospital clinics, private practice and consultative ventures. Students introduced to current trends in billing and reimbursement strategies being used by clinicians.

**PHYT 614: Sports and Orthopedics (Elective, variable 1-3 credits)**

This course is an advanced orthopedics course with emphasis in sports related injuries. We will discuss evaluation and intervention of the athlete in the various major joints of the body, as well as, other related topics in sports and orthopedics.

**PHYT 806: Geriatrics (3 credits)**

A comprehensive view of the geriatric physical therapy patient will be presented. To that end this course has two basic components: a psychosocial component and a physical therapy practice component. The psychosocial component will provide an in-depth discussion of the demographics of the elderly in the United States, theories of aging, transition to old age, dementia, sexuality, and falls. It will also address the perceptions clinicians and society has on aging and the elderly. Ageism will also be addressed in some depth. The physical therapy practice component of the course will address those medical conditions commonly found in the elderly that require physical therapy intervention. At the conclusion of the course, the student will be expected to be able to discuss the necessary current practice management strategies for geriatric physical therapy patients, taking into account the psychosocial and physical aspects of their geriatric patient.

**PHYT 811: Pediatrics (4 credits)**

Instruction in the theory, research and clinical skills necessary for the comprehensive management of pediatric clients and their families. Emphasis on the incorporation of modern developmental science into evidenced-based program plans.

**PHYT 821: Orthopedic Integrated Clinical Experience (3 credits)**

This is one of three part-time clinical experiences which will integrate course content taught in the DPT curriculum. PHYT 821 is a semester long, part-time clinical experience conducted under the supervision of qualified physical therapists in the University of Delaware Physical Therapy Sports and Orthopedic Clinic to provide a wide range of professional learning opportunities and clinical training.

**PHYT 822: Neurologic/Older Adult Integrated Clinical Experience (3 credits)**

This is one of three part-time clinical experiences which will integrate course content taught in the DPT curriculum. PHYT 822 is conducted under the supervision of qualified physical therapists in the University of Delaware Neurologic and Older Adult Physical Therapy Clinic to provide a wide range of professional learning opportunities and clinical training.

**PHYT 812: Pediatric Integrated Clinical Experience (1 credit)**

Mentored clinical experience in pediatric healthcare facilities.

**PHYT 831: Full-time Clinical Education Experience - Inpatient (4 credits)**

A ten-week, extended, full-time inpatient clinical experience wherein students participate in the physical therapy management of patients with acute health and/or complex multisystem needs within an inter-professional and/or team-based setting. Based upon fluctuant patient presentations, students will be challenged to develop a comprehensive discharge disposition and modify treatments accordingly.

**PHYT 833: Full-time Clinical Education Experience - Outpatient (4 credits)**

A ten-week, extended, full-time outpatient clinical experience wherein students participate in the physical therapy management of patients with musculoskeletal, neuromuscular, cardiopulmonary, and/or integumentary impairments via implementation of evidence-based interventions, home exercise programs, and education to maximize health, wellness, and return to function.

**PHYT 834: Full-time Clinical Education Experience – Elective (4 credits)**

A ten-week, extended, full-time clinical experience wherein students may participate in physical therapy research, teaching, administration, and/or the provision of skilled physical therapy services. Students may choose from a range of practice settings and patient populations.

**Additional Courses beyond DPT Degree Requirements**

**PHYT 866: Independent Study** (Elective, credits variable, requires departmental consent).