

PHYSICAL THERAPY (PT)

PT 611 Foundations of PT Practice and Professional Formation 1

2 Class Hours, 6 Lab Hours, 5 Quarter Credit Hours

Students are introduced to the professional formation course series which occurs over 8 courses through the curriculum that explores the profession of physical therapy, the role of physical therapists and physical therapist assistants within healthcare, and the scope of physical therapist practice. Effective communication, giving and receiving feedback, patient-centered approach to patient education, adaptation of instruction, barriers/facilitators of learning, and behavior change theories/models are addressed. Students demonstrate competency in previously learned physical therapy skills and interventions in preparation of future learning. Students will complete practical examination skill checks for patient communication, vital signs, asepsis techniques, goniometry, range of motion, patient mobility, mechanical and physical agents, basic therapeutic exercise, and massage.

PT 613 Foundation of Movement System 1 – Introduction

1 Class Hours, 2 Lab Hours, 2 Quarter Credit Hours

This course provides an introduction to the movement system as a basis for analyzing and promoting human movement. Students demonstrate competency in previously learned knowledge of surface anatomy as a PTA through skill checks. Virtual reality, simulation and other learning tools are introduced for the foundational movement system sequence.

PT 614 Foundation of Movement System 2 – Gross Anatomy

4 Class Hours, 4 Lab Hours, 6 Quarter Credit Hours

This is an integrated lecture/lab course involving study of the skeletal, articular, muscular, ligamentous, nervous and vascular systems of the human body. Through a combination of regional and systems-based instructional approaches, students will develop an understanding of human anatomical structure at the macroscopic level, as well as the functional interdependence of one body region or system on the others. Laboratory sessions will utilize a combination of cadaveric, extended reality and plasticated models to provide the opportunity for students to survey the physical tissues presented in the didactic portion of the course and demonstrate surface anatomy palpation procedures.

PT 721 Foundations of PT Practice 2 – Biomechanics/Kinesiology

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course focuses on functional movement biomechanics and qualitative movement analysis of human movement patterns with an emphasis on optimizing technique and performance. It explores the various human systems including the musculoskeletal and nervous systems and the different internal and external forces that act on them. In laboratory experiences, students will learn how to apply biomechanics and motion analysis principles to the movement system to improve functional performance of individuals with and without dysfunction. Students demonstrate competence in analysis of major joints and regions of the body as related to physical therapist practice.

PT 722 Foundations of PT Practice 3 – Exam

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course provides students opportunities to apply physical therapy examination procedures and principles and demonstrate safe techniques in laboratory sessions. Students analyze examination data to interpret and present findings in patient friendly culturally sensitive language.

PT 725 Professional Formation 2 – Clinical Decision-Making PTA to DPT

2 Class Hours, 2 Quarter Credit Hours

Provides students evidence-based principles in clinical decision making and compares the thought processes of PTA and PT. Students Apply the principles of the APTA code of ethics, APTA professional core values, health equity and health promotion principles through case discussion.

PT 900 Patient Management 1 – Cardiopulmonary and Integumentary

4 Class Hours, 4 Lab Hours, 6 Quarter Credit Hours

This course applies the Guide to PT practice for physical therapy management of patients with disorders of the cardiovascular, pulmonary and integumentary systems. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for the cardiovascular, pulmonary, and integumentary systems. Students demonstrate psychomotor skills and clinical decision making through laboratory work.

PT 902 Biopsychosocial Influences of PT

2 Class Hours, 2 Quarter Credit Hours

This integrated lecture/lab course will lead students through the study of pain as a multidimensional experience, as framed by the biopsychosocial model. Pain epidemiology, diagnosis and classification will be presented. Pain neuroscience will be covered as a mechanism to understand the experience and modulation of pain. Screening tools will be presented that identify populations vulnerable to chronic pain. Students will learn to engage in psychologically informed Physical Therapy through the integration of psychosocial treatment techniques and by identifying when and how to engage a multidisciplinary team to best meet the patient's needs.

PT 906 Pathology & Pharmacology

4 Class Hours, 4 Quarter Credit Hours

This course provides the foundational knowledge needed related to pathologies, medical tests, nutrition, pharmacology, and lab values for all Hematological, Lymphatic, Immunological, Endocrine, Gastrointestinal, Hepatic, Urogenital, Renal, and Oncologic conditions. Students begin the foundational knowledge of differential diagnoses through exploration of the pathological processes and rehabilitative interventions related to conditions of these systems. Case based discussions are utilized to integrate pathology, pharmacology and physical therapy plan of care.

PT 911 Foundation of PT Practice 4 – Motor Control

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course will cover theories of motor control and motor learning, knowledge generation, sport research, and theories of action. Course will provide students with opportunities to experiment with these theories in real life. Students will participate in practical exercises in which they reflect on real situations that they have faced in their past professional experience. Through these practical exercises, students will have the opportunity to reflect on their thinking capacities in the context of their physical therapy practice.

PT 913 Foundation of Movement System 3 – Neuroscience

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course explores central and peripheral neuroanatomy and neurophysiology with emphasis on the motor and somatosensory systems. Lab activities provide students with multimodal methodologies to identify and explain central and peripheral neuroanatomy structures. Global etiologies and impacts of central and peripheral nervous system disorders are introduced. Related diagnostic assessment methodologies are introduced.

PT 916 Evidence-Based Practice

2 Class Hours, 2 Quarter Credit Hours

Students use current PT literature to explore the use of best research evidence and outcomes measurement applying critical appraisal techniques. Common qualitative and quantitative methods of data analysis are presented. Students explore various avenues for an individual scholarly project of community interest and/or relevance related to evidence-based physical therapy practice.

PT 925 Professional Formation 3 – Ready for Clinical

2 Class Hours, 2 Quarter Credit Hours

Students demonstrate competence in readiness for clinical physical therapy skills through practical and didactic examinations. Students complete necessary modules in readiness for clinical education to prepare them for clinical education one experience.

PT 927 Musculoskeletal Examination and Treatment 1

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course is one of a three-part series on musculoskeletal management. Course introduces the guide to PT practice for physical therapy management of patients with disorders of the musculoskeletal system. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for upper quarter regions of the musculoskeletal system. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 928 Neuromuscular Examination and Treatment 1

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course is one of a three-part series on Neuromuscular system management. Course applies the Guide to PT practice for physical therapy management of patients with disorders of the neurological system. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for congenital neurological conditions. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 929 Clinical Research Capstone 1

2 Class Hours, 2 Quarter Credit Hours

This course is designed to advance the doctoral student to contemporary and emerging practice areas in physical therapy. Students will review evidence to support the role of PT in contemporary practice as well as emerging areas. Students research evidence-based interventions under faculty-led research and design a case-based project, educational project or literature review and develop a proposal for approval by the Human Subjects Review Board. Students present their proposals via presentation to the entire class.

PT 939 Clinical Education 1

10 Class Hours, 10 Quarter Credit Hours

Provides students the clinical opportunity to demonstrate their examination, intervention and clinical decision-making skills previously learned in the curriculum under the supervision of a licensed physical therapist.

PT 945 Professional Formation 4 – Wellness Participation

2 Class Hours, 2 Quarter Credit Hours

This course continues the Professional Formation course series with a focus on health and wellness of the whole person. Course emphasizes population health, wellness, health equity and health promotion, and the study of health care policy and delivery as it affects the practice and payment of physical therapy services. Principles of access, equity, availability, cost, and quality of health services are introduced. Theories and research to promote and preserve wellness lifestyles in client populations using epidemiological principles, disease risk appraisal and reduction, and other tools are presented. Roles in advanced physical therapy practice as they relate to the health of diverse populations are identified and explored. Students participate in service-learning wellness experience.

PT 947 Musculoskeletal Exam and Treatment 2

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course is two of a three-part series on musculoskeletal management. This course integrates the guide to PT practice for physical therapy management of patients with disorders of the musculoskeletal system. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for lower quarter regions of the musculoskeletal system. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 948 Neuromuscular Exam and Treatment 2

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course is two of a three-part series on Neuromuscular system management. Course applies the guide to PT practice for physical therapy management of patients with disorders of the neurological system. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for acquired neurological conditions. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 950 Patient Management 2 – Acute Care/Home Care

3 Class Hours, 4 Lab Hours, 5 Quarter Credit Hours

This course is designed to use clinical cases and simulations to further develop examination and clinical decision-making skills. This course focuses on common conditions across the lifespan in Acute Care/ Hospital based/ Home Care clinical settings and evidence-based patient interventions for these settings.

PT 952 Orthotics, Prosthetics and Assistive Technology

2 Class Hours, 2 Lab Hours, 3 Quarter Credit Hours

This course provides students the opportunity to explore assistive technology, orthotics, prosthetics and other assistive living devices and utilize case studies to create physical therapy plans of care. In laboratory sessions students manipulate and critically appraise the use of these devices on the movement system.

PT 955 Professional Formation 5 – Leadership

3 Class Hours, 3 Quarter Credit Hours

This course explores the knowledge base and selected skills related to practice management and leadership. Content includes human resource and operations management, fiscal management and accountability, billing, coding, payer systems, project management, marketing management, and information technology management, as well as essential practice management skills necessary for patient/client management including communication, chart reviews, referral, direct access and quality improvement.

PT 956 Professional Formation 6 – Inter and Intra-Professional Practice

2 Class Hours, 2 Quarter Credit Hours

This course is part of the professional formation course series that explores the profession of physical therapy, the role of physical therapists and physical therapist assistants within healthcare, and the scope of physical therapist practice. This course emphasizes Interprofessional Collaborative Practice through Interprofessional Education experiences with other health professions and Intraprofessional Practice experience with PTA and PT. Activities and discussions are focused on the interprofessional core competencies of values and ethics, communication, roles and responsibilities and teamwork as well as supervision and delegation.

PT 960 Patient Management 3 – Complex Integration Cases and Differential Diagnosis

2 Class Hours, 2 Quarter Credit Hours

Through the use of clinical cases, Applied Patient Management presents complex, realistic cases requiring competent evidence-based patient management and differential diagnosis from initial referral to final disposition in preparation for clinical practice. As part of this course they complete the final comprehensive practical exam and develop plans for success including a study plan for licensure preparation.

PT 967 Musculoskeletal Exam and Treatment 3 – Lifespan and Special Topics/ Complexity

2 Class Hours, 4 Lab Hours, 4 Quarter Credit Hours

This course is three of a three-part series on musculoskeletal system management. This course clinically applies the guide to PT practice for physical therapy management of patients with disorders of the musculoskeletal system with a focus on special populations across the lifespan. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for special populations across the lifespan. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 968 Neuromuscular Exam and Treatment 3 – Lifespan and Special Topics/Complexity

2 Class Hours, 4 Lab Hours, 4 Quarter Credit Hours

This course is three of a three-part series on Neuromuscular system management. Course clinically applies the guide to PT practice for physical therapy management of patients with disorders of the neurological system. Topics cover anatomy, pathologies, etiologies, genetics, medical tests, nutrition, pharmacology, lab values, differential diagnoses, clinical decision making, and evidence based physical therapy examination and interventions for special populations across the lifespan. Students demonstrate safe psychomotor skills and clinical decision making through laboratory work.

PT 969 Clinical Research Capstone 2

4 Class Hours, 4 Quarter Credit Hours

This course is the second in the capstone course series. Students analyze and interpret the data previously collected for Capstone 1 to define and summarize any theoretical constructs relevant to their doctoral project. Students create a peer reviewed journal article and professional platform presentation. Students present their doctoral project to mentors, faculty and community stakeholders.

PT 976 Diagnostic Imaging

3 Class Hours, 3 Quarter Credit Hours

This course integrates diagnostic imaging procedures and principles relevant to physical therapy practice. Imaging case studies are utilized to promote synthesis of material and extend students evidence-based practice.

PT 979 Clinical Education 2

10 Class Hours, 10 Quarter Credit Hours

Provides students a second clinical opportunity to demonstrate their examination, intervention and clinical decision-making skills at a higher level of mastery under the supervision of a licensed physical therapist.

PT 985 Professional Formation 7 – Entry-Level Practice

2 Class Hours, 2 Quarter Credit Hours

This course is part of professional formation series that explores the profession of physical therapy, the role of physical therapists and physical therapist assistants within healthcare, and the scope of physical therapist practice. This course emphasizes personal and professional growth beyond completion of the physical therapist education with exploration of opportunities and professional duties for moving from novice to expert practitioner, including fiscal management, professional advocacy and legislation, involvement in clinical education, clinical specialist certification, utilization of the scientific literature, reflection on practice, professional writing and public presentation skills leadership, and other professional issues. Students present a portfolio of learning which includes future professional career plan, and a plan for lifelong learning and service.

PT 989 Clinical Education 3

10 Class Hours, 10 Quarter Credit Hours

Provides students a final clinical opportunity to demonstrate their examination, intervention and clinical decision-making skills and demonstrate entry level performance under the supervision of a licensed physical therapist. Students participate in online coursework in preparation for entry into their professional career as an entry level physical therapist. Students reflect on clinical affiliations and discuss a variety of topics related to their experiences and professional practice. Students develop job search strategies and identify post-graduation career opportunities.