

# Course Descriptions

**PTH500: Doctoral Colloquium 2CR**

A degree orientation course, which will include introduction to the degree(s), utilization of services at Andrews University; introduction to the Guide to Physical Therapy Practice; development of the degree contract and portfolio review.

**PTH545: Advanced Clinical Physiology 3CR**

The review of human physiological function of the major body systems with clinical application to musculoskeletal, cardiovascular, and pulmonary conditions. Detailed information on exercise physiology is discussed along with clinical applications among patients with compromised health.

**PTH549: Principles of Contemporary Leadership 3CR**

Theory and application of complexity sciences to organizational management; exploration of key leadership roles and changing paradigm; presentation of methods to maximize personal and professional life.

**PTH590: Topics in Comparative Religion 2CR**

Information presented to allow the clinician to be sensitive to the different faith practices and cultures of their clients and how to use that information to treat the person in a professional manner conducive to healing.

**PTH615: Clinical Pharmacology 2CR**

Develops a non-prescriptive knowledge of specific medications including indications, contraindications, precautions, adverse reactions, and dosage, especially as related to physiological effects of physical therapy interventions.

**PTH630: Clinical Research 2CR**

Introduces the student to the basic concepts of biostatistics and research design and the formulation of evidence based practice strategies.

**PTH646: Spirituality in Healthcare 3CR**

A discussion of individual spiritual values; spiritual values from a Christian perspective; how faith and spirituality facilitate the healing process, and how these can be incorporated into patient care. Attention will be given to discerning/addressing the spiritual needs of the patients/clients, family members and ancillary medical staff in a professional environment.

**PTH718: Clinical Screening & Differential Diagnosis 3CR**

Knowledge and clinical skills designed for screening patients for medical conditions. Differential diagnosis is addressed through comparison of systematic signs and symptoms. Appropriate diagnostic tests which may indicate involvement of a problem outside the scope of PT practice are addressed. Enhances professional communication with other healthcare practitioners included in the referral process.

**PTH730: Medical Diagnostics 2CR**

Addresses imaging, body chemistry values and data derived from musculoskeletal, neurologic, vascular, cardiac and pulmonary testing with the purpose of understanding the disease process. Application of knowledge will determine differential diagnoses.

**PTH740: Advanced Topics in Clinical Research 3CR**

This course continues to cover the topics introduced in PTH630 in a more in-depth fashion. The student will learn how to set up a research study as well as, review the literature and analyze the validity of the information presented. An introduction to setting up outcome studies will also be covered.

**PTH748: Education Techniques for Healthcare Professionals 2CR**

Examines and applies educational theory to skills utilized by the physical therapist in the classroom, community, and clinical facility. Topics include the educational role of the physical therapist, the taxonomies of learning, learning styles, multiple intelligence, and education technology.

**PTH760: Applications in Clinical Research 2CR**

Information presented on how to develop and present a publishable quality case study. Actual practice of doing an outcomes study in a clinical environment.

**PTH750: Professional Communication and Consulting 2CR**

An introduction to the integration of the physical therapist as a consultant. Discussion will include applying physical therapy consultation to services to individuals, business, schools, government agencies and/or other organizations.

**PTH798: Capstone Experience 1-6CR**

Serves as an essential outcome component to augment the professional development and new learning that Occurs in didactic course work and demonstrates the ability of the graduate to make significant contributions to the profession and/or serve as a change agent in the field of physical therapy.

**PTH536: NAIOMT Level I: Intro to the Fundamentals of Ortho/Manual Therapy 3CR**

Appropriate skills in basic and objective selective tissue examination necessary for generating a provisional differential diagnosis of spinal dysfunction. Signs, symptoms, pathology, and management of common spinal pathologies are reviewed. Selective tissue tensioning techniques for the peripheral joints are introduced. Cyriax's principles are introduced.

# Course Descriptions

**PTH537: NAIOMT Level II: 3CR**  
**Intermediate Upper Quadrant**

A comprehensive biomechanical and anatomical review of the upper thoracic, upper and lower cervical spine, shoulder, elbow, wrist and hand. Specific biomechanical assessment of each area is taught along with appropriate and effective treatment techniques for common injuries and mechanical dysfunctions.

**PTH538: NAIOMT Level II: 3CR**  
**Intermediate Lower Quadrant**

A comprehensive biomechanical and anatomical review of the lower thoracic and lumbar spines, the hip, knee ankle and foot. Specific biomechanical assessment of each area is taught along with appropriate treatment techniques for common injuries and dysfunctions.

**PTH546: NAIOMT Level III: 3CR**  
**Advanced Upper Quadrant**

Builds on the techniques learned in Level II and helps the student understand the kinetic chain inter-relationships of the upper quadrant. Integrates information generated in the assessment to understand how remote dysfunctions can be casual or contributory. Advanced techniques are demonstrated along with new material on temporo-mandibular joint material and peripheral manipulation skills. *Prerequisite: PTH537*

**PTH547: NAIOMT Level III: 3CR**  
**Advanced Lower Quadrant**

Builds on the techniques learned in Level II and helps the student understand the kinetic chain inter-relationships in the lower quadrant. Presents advanced biomechanical tests and treatment and includes the sacroiliac and pubic joints. Discusses the integration of examination and treatment techniques. *Prerequisite: PTH538*

**PTH548: NAIOMT Level IV: 3CR**  
**High Velocity Manipulation**

Instructs the student on the indications and contra-indications, as well as, the safe and effective application of spinal, pelvic, and costal manipulation techniques. *Prerequisites: PTH546 and 547*

**PTH550: NAIOMT Supervised Clinical Practice 4CR**

Using a 3- to-1 model, students will be required to do a minimum of 60 supervised clinical hours applying hands-on techniques with patients under the supervision of a certified NAIOMT clinical instructor. These hours can be done all at one time or split up according to the students desire.

## ELECTIVES

Students may develop a personal elective plan in areas of interest. Electives may involve continuing education courses available closer to home, or they may be chosen from the list of specialty courses on the NAIOMT web site. If there are enough student interest in one course, it can be offered on the Andrews Campus.

**PTH556: NAIOMT: Pelvic Girdle 2CR**

Lecture/lab course focused on detailed examination and treatment of the pelvic girdle. Emphasis is placed on a biomechanical model of testing and treating clinical dysfunction and pain.

**PTH557: NAIOMT: Thoracic Spine 2CR**

Lecture/lab course studying the thoracic spine as a source of spinal dysfunction. Emphasis is placed on a biomechanical model for detailed examination and treatment of the thoracic spine and costovertebral dysfunctions.

**PTH558: NAIOMT: Post Motor Vehicle 2CR**  
**Accident Cervical Dysfunction**

Lecture/lab course focused on examination and treatment of the patient with cervical trauma following a MVA. Emphasis is placed on developing a safe, effective and progressive examination and treatment program based on anatomical, histological and biomechanical changes resulting from the MVA trauma.

**PTH576: NAIOMT: Headaches, Dizziness & 2CR**  
**Chronic Neck Pain**

Lecture/lab course that explores the causes of the myriad of symptoms a patient with chronic neck pain may experience. Evaluation and treatment strategies are reviewed.

**PTH590: Topics in Physical Therapy 1-10CR**

Exists to allow independent direction in the elective rack. Topic decided by student and advisor.

**PTH618: Sports Physical Therapy 2CR**

Understanding physical therapy management of athletes: topics unique to sport medicine include pre-participation screening examinations, field management of athletic injuries, designing comprehensive rehabilitation and conditioning programs, taping techniques, equipment fitting, biomechanics of the upper extremity and lower extremity in sports specifically related to evaluation and treatment of common athletic injuries.

**PTH628: Active Learning in Physical Therapy 2CR**

Introduction to teaching strategies which facilitate student engagement and ownership in the learning process, including problem based learning. These strategies will be useful for classroom, tutorial, lab and continuing education instruction.

**PTH690: Independent Learning Contract 2CR**

The student, working with their advisor and following degree/course guidelines will develop an independent 40 hour learning contract with a qualified clinical specialist to facilitate intensive focused clinical training in a field of study of their choosing.