

PETH457 **Alt (2)**

Physical Education in the Elementary School

Content and organization of physical education programs in the elementary schools.

PETH450 **(1-10)**

Practicum in Health, Physical Education, and Recreation

Supervised experience in area health, fitness, and rehabilitation programs. Limited to junior or senior departmental majors. Graded S/U. *Fall, Spring*

PETH457 **Alt (2)**

Physical Education in the Elementary School

Content and organization of physical education programs in the elementary schools. *Fall* (even years)

PETH459 **Alt (3)**

Secondary Methods in Teaching Physical Education

The application of teaching principles and strategies as they apply to Secondary Physical Education. Should be taken the senior year. *Fall* (even years).

PETH460 **Alt (1)**

Organization and Administration of Physical Education

Techniques and methods of administration and organization of a physical education department. Areas include facility management, supervision of workers, budgeting, intramural organization, public relations, and legal issues. Should be taken the senior year. *Spring* (even years)

PETH470 **Alt (1)**

Seminar in Physical Education and Health

Explores current issues relevant to physical education and health, by presentations, readings, and projects. Prerequisites: PETH306, 360, 370. *Fall* (even years)

PETH495 **(1-4)**

Independent Study/Reading/Research/Project

Independent Study: Directed study in an area of interest resulting in a formal term paper.

Independent Readings: Weekly meetings with the instructor for individual assignments and reports.

Independent Research: Design and execution of an experiment or causal-comparative research.

Independent Project: Practical or creative experience or project in consultation with instructor. Permission required from the instructor and department chair. Thirty hours of involvement required for each credit. Contract of proposed activity required. Repeatable to 4 credits in each area. ~~Super Side experientuStudy~~

Physical therapy is a health profession dedicated to evaluating, treating, and preventing physical injury and disease. Physical therapists design and implement the necessary therapeutic interventions to promote fitness, health and improve the quality of life in patients. They also become active in consultation, education and research.

Physical therapists work closely with their client's family, physician, and other members of the medical team to help their client return to their home environment and resume activities and relationships of normal daily living.

PROFESSIONAL ENTRY-LEVEL PROGRAMS

Doctor of Physical Therapy (DPT). This three-year program begins after a student completes 92 semester credits of college prerequisites. A previous college degree is not necessary. Students may earn two degrees: an interim Bachelor of Health Science (BHS)—received after one year in the professional program—and a DPT degree.

Master of Science in Physical Therapy (MSPT). The department is no longer enrolling students in the MSPT program. For specific degree information please see bulletin of the admission year to the professional program.

Master in Physical Therapy (MPT). This two-year program is offered in Dayton, OH. The curriculum uses problem-based learning and is designed for individuals who already have completed a baccalaureate degree. The MPT faculty are currently working on a proposal for the Ohio Board of Regents (OBR) which would allow the Dayton program to offer the DPT degree. This proposal will be submitted to the OBR spring semester 2002.

ACCREDITATION AND BOARD CERTIFICATION

The DPT, MSPT, and MPT programs are all accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). Graduates may apply to take the state board examination in the state of their choice after receiving the DPT, MSPT, or MPT degrees.

INFORMATION/APPLICATION PACKETS

Packets which describe admission requirements for the DPT and MPT professional entry-level programs and provide all necessary forms and instructions for application are available by June of each year. Applicants holding a baccalaureate or advanced degree are welcome to apply to either entry-level program and will receive equal consideration for admission. Please call 1-800-827-2878, email pt-info@andrews.edu or visit www.andrews.edu/PHTH.

DPT PROGRAM

Berrien Springs, MI

ADMISSION REQUIREMENTS

Admission to the DPT program is selective based on the following considerations:

- 1. Prerequisite Courses:** Complete 92 semester credits of appropriate course work. At least 15 upper division credits from 3 or more content areas are required, unless holding a bachelor's degree.

Biological Sciences—A full sequence of anatomy and physiology or general biology with labs

PROFESSIONAL PROGRAM: UNDERGRADUATE YEAR

The first year of the three-year professional education program is offered at the senior-year undergraduate level. Students successfully completing their prerequisites and the first year of the professional program qualify for an interim Bachelor of Health Science degree.

Continued Undergraduate Enrollment Requirements

Students must successfully complete all didactic PTH course work listed for the previous academic term, maintain the minimum cumulative GPA, technical standards, and professional behaviors.

See *Physical Therapy Student Handbook* for more information regarding minimum GPAs for academic progression, technical standards, professional behaviors, and other specific requirements.

Bachelor of Health Science

(Interim Degree)

Prereqn08—

MPT DEGREE REQUIREMENTS

In addition to the General Minimum Requirements for graduate-degree programs on p. 45, the following departmental/program

Courses

(Credits)

See inside front cover for symbol code.

Written permission from the Chair of the Department of Physical Therapy is required for non-physical therapy students to enroll in PTH/PHTH courses.

PHTH120 (2)

Introduction to Physical Therapy

An introduction to the profession of physical therapy with an overview of duties and responsibilities physical therapists perform. Partially fulfills the clinical observation prerequisites for admission to the professional program. Students must have their own transportation for the clinical observation.

PHTH417 ◆ (3)

Human Anatomy

Comprehensive study of human anatomy covering all systems of head, neck, trunk, and extremities. A solid morphological basis for a synthesis of anatomy, physiology, and clinical sciences provided. Dissection and identification of structures in the cadaver, and the study of charts, models, and prosected materials. Prerequisites: BIOL111, 112 or BIOL165, 166 or equivalent. See instructor for additional requirements. Corequisite: PTH427.

PHTH427 \$ ◆ (1)

Human Anatomy Laboratory

Study of the prosected extremity, head and neck anatomy, and dissection of the abdominal and thoracic organ systems. Prerequisites: same as for PTH417. Corequisite: PTH417.

DPT PROGRAM

Berrien Springs, MI

PTH400 (4)

Anatomy

A comprehensive study of human anatomy with emphasis on the nervous, skeletal, muscle, and circulatory systems. Introduction to basic embryology and its relation to anatomy and the clinical sciences concludes the course. Provides a solid morphological basis for a synthesis of anatomy, physiology, and the physical therapy clinical sciences. Corequisite: PTH410.

PTH410 (3)

Anatomy Laboratory

Dissection and identification of structures in the cadaver supplemented with the study of charts, models, prosected materials and radiographs are used to identify anatomical landmarks and configurations. Corequisite: PTH400.

PTH415 (4)

PT Assessment Skills

Introduction to assessment principles and examination skills utilized in all areas of physical therapy. The *Guide to Physical Therapy Practice* is referenced for the basic skills required in the assessment, intervention and documentation guidelines. Corequisite: PTH425.

PTH416 (3)

Pathokinesiology

The study of human movement including an introduction to the basic concepts of biomechanics with an emphasis on human joint/muscle structures and function, advancing to analysis of body mechanics, normal gait analysis, and pathological movement

analysis. Joint abnormalities will be identified using radiographs, related to the resultant movement dysfunction. Prerequisites: PTH400 and 410. Corequisite: PTH426.

PTH418 (2)

General Medicine

Clinical techniques applied to the examination, evaluation, intervention, and discharge planning of patients in general medical, acute-care and subacute-care settings. Emphasis on physical therapy intervention with relevant factors, management of pain and physical complications during medical treatment, and examination and intervention of special populations including wound and burn care. Corequisite: PTH428.

PTH420 (3)

Therapeutic Interventions

Basic principles, physiologic effects, indications and contraindications, application and usage of equipment, and intervention rationale for hydrotherapy, thermal agents, wound care, massage, electrotherapy and mechanotherapy (traction) and other therapeutic interventions. Corequisite: PTH430.

PTH425 (2)

PT Assessment Skills Laboratory

Basic examination skills including sensation, joint motion, vital signs, girth and palpation will be practiced. Clinical application in basic physical therapy care including patient positioning, transfer and transport techniques, selection and use of ambulatory aids, vital sign determination, aseptic techniques, basic wound care, and blood-borne pathogens. Corequisite: PTH415.

PTH426 (2)

Pathokinesiology Laboratory

Basic examination procedures for joint motion and limb measurements including goniometry, volumetric measurements, palpation, muscle strength testing, and introduction to accessory joint movement. Integration of basic examination skills with gait and movement analysis. Prerequisites: PTH400 and 410. Coerequisite: PTH416.

PTH428 (1)

General Medicine Laboratory

Practice in examinations modified for the acute-care environment. Applications include home-and work-place evaluation for architectural barriers, functional procedures, serial casting, traction and modification of interventions for acute care including documentation. Corequisite: PTH418.

PTH430 (2)

Therapeutic Interventions Laboratory

Supervised practicum includes patient positioning and application of the therapy to obtain desired physiological response. Techniques of hydrotherapy, thermal agents, wound care, and massage, as well as specific electrotherapy and mechanotherapy treatments and assessment of physiological responses to those treatments. Corequisite: PTH420.

PTH440 (3)

Pathophysiology I

Sequence studying disease processes affecting major body systems and the resulting anatomical and pathophysiological changes. Clinical presentations and pharmacological treatment of patients with those disease processes are presented, as well as diagnostic tests and laboratory values used to identify pathological conditions. Prerequisites: PTH400 and 410.

PTH445 (2)

Neuroscience

Basic anatomy and functions of the central and peripheral nervous systems and their related structures. Sensory and motor pathways of the central nervous system are examined along with a study of membrane permeability, synaptic transmission and neuro transmitters. A cranial overview is also included. Prerequisites: PTH400 and 410. Corequisite: PTH455.

PTH455 (1)

Neuroscience Laboratory

Study of the projected central and peripheral nervous tissues, models, and charts. Imaging will be used to compare normal to abnormal CNS presentation. Prerequisites: PTH400 and 410. Corequisite: PTH445.

PTH457 (2)

Orthopedic Medicine

chi square, correlations, and linear regressions. Corequisite: PTH622.

PTH635 (1)

Cardiopulmonary Laboratory

Emphasis on physical therapy assessment and intervention with cardiac and pulmonary patients. Practice of relevant techniques, such as stress testing, percussion, pulmonary function tests and breathing techniques, as well as other techniques identified in the *Physical Therapy Guide to Practice*. Corequisite: PTH625.

PTH637 (1)

Orthotics and Prosthetics Laboratory

Practice of the physical therapy techniques required in the application of orthotic and prosthetic devices. Special attention given to gait and function. Selected topics such as wheelchair modifications, miscellaneous ortho-rehab apparatus, and other assistive/adaptive devices included. Corequisite: PTH627.

PTH640 (2)

Pediatrics

An overview of embryologic development, followed by normal infant/child development to 5 years of age with an emphasis on motor development. Identification of assessment techniques for infants and children with normal and abnormal development. Description of various pediatric pathologies encountered in physical therapy with appropriate corresponding assessment and treatment approaches. Corequisite: PTH650.

PTH645 (4)

Physical Therapy Administration and Leadership

A study of the organizational structures, operations, and financing of healthcare delivery institutions and an examination of the organization and interrelationship of its professional and support elements. Application of current health care management strategies and theory are related to the acute-care facility and independent practice.

PTH646 (2)

Spirituality in Healthcare

A discussion of 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 and addressing the spiritual needs of patients/clients, family members, and ancillary medical staff in a professional environment.

PTH647 (2)

Differential Diagnosis

Analysis of the decision making process, with special focus on clinical guidelines, *Physical Therapy Guide to Practice*, and differential diagnosis. Differential diagnosis is addressed through comparison of systemic signs and symptoms, as well as appropriate diagnostic tests which may indicate involvement of a problem outside of the scope of PT practice.

PTH650 (2)

Pediatrics Laboratory

Practice of physical therapy assessment of the infant/child that address different developmental domains. Practice in the special

PTH717 (2)

Advanced Concepts in Aquatic & Alternative Medicine

Advanced aquatic therapy program design and intervention and an overview of complementary therapies focusing on physical therapy evaluation and intervention. Corequisite: PTH727.

PTH720 (1)

Advanced Concepts in Neurology Laboratory

Clinical application, rehabilitation practice, and techniques applied to advanced clinical practice in the treatment of neurological dysfunction. Theories and clinical areas covered may include Neuro Developmental Technique (NDT), Motor Relearning Program

- PHTH362** (1)
Pediatrics I Laboratory
Practice in various specific tests used in the physical therapy evaluation of the infant/child that address different developmental domains. Corequisite: PHTH361.
- PHTH363** (1)
Pediatrics II
Description of various pediatric pathologies encountered in physical therapy with appropriate corresponding evaluation and treatment approaches. Normal and abnormal motor development is contrasted. Prerequisite: PHTH361 and 362. Corequisite: PHTH364.
- PHTH364** (1)
Pediatrics II Laboratory
Practice in the special techniques required in evaluation and treatment of pediatric patients diagnosed with selected pathologies. Introduces current treatment approaches, such as Neuro Developmental Treatment (NDT) and others, with their effects on treatment goals. Prerequisites: PHTH361 and 362. Corequisite: PHTH363.
- PHTH414, 415** (1.5,1.5)
Clinical Practicum I, II
Practice of the knowledge and skills developed in the classroom and lab in a patient-care setting. Each practicum consists of 3 weeks full-time physical therapy experience in clinical facilities affiliated with the university. Repeatable.
- PHTH421** ◆ (1.5)
Orthopedic Procedures I
Presentation of fundamental physical therapy knowledge in evaluating and treating a patient with both acute and chronic conditions of the extremity joints. Corequisite: PHTH431.
- PHTH422** ◆ (1.5)
Orthopedic Procedures II
Presentation of fundamental physical therapy knowledge and evaluation techniques in pathology of the cervical, thoracic, and lumbar spine. Prerequisites: PHTH421 and 431. Corequisite: PHTH432.
- PHTH423** ◆ (1.5)
Orthopedic Procedures III
Presentation of information regarding orthopedic pathology of the cervical, thoracic, and lumbar spine with emphasis on treatment techniques for the different pathologies from a physician and physical therapist's perspective. Prerequisites: PHTH422 and 432. Corequisite: PHTH433.
- PHTH426** ◆ (1.5)
Survey of Neurophysiology
Readings in the recent neurophysiological research literature with reports on scientific findings. Application of the materials studied to the treatment of patients with neurological disorders.
- PHTH431** ◆ (1)
Orthopedic Procedures I Laboratory
Designed for practice of the special techniques to evaluate and treat acute and chronic orthopedic pathologies of the extremity joints. Corequisite: PHTH421.
- PHTH432** ◆ (1)
Orthopedic Procedures II Laboratory
Designed for practice of the special techniques required to evaluate acute and chronic orthopedic pathologies of the cervical, thoracic, and lumbar spine. Prerequisites: PHTH421 and 431. Corequisite: PHTH422.
- PHTH433** ◆ (1)
Orthopedic Procedures III Laboratory
Designed for practice of the special techniques required to treat acute and chronic orthopedic pathologies of the cervical, thoracic, and lumbar spine. Prerequisites: PHTH422 and 432. Corequisite: PHTH423.
- PHTH441, 442, 443** (1.5, 1.5, 1.5)
Medical Diseases
Sequence studying disease processes affecting major body systems and the resulting anatomical and pathophysiological changes. Clinical presentations and pharmacological treatment of patients with those disease processes considered.
- PHTH447** ◆ (2)
Neuroanatomy
Basic anatomy and functions of the central and peripheral nervous systems and their related structures. Studies specific pathways of the central and peripheral nervous systems and takes a detailed look at each of the 12 pairs of cranial nerves. Prerequisite: PHTH317. Corequisite: PHTH457.
- PHTH448** (1.5)
Neuroscience I
Basic physiological and neurophysiological mechanisms specific to nervous system dysfunction. Clinical concepts in appropriate treatment of conditions affecting the nervous system, such as spinal cord injury, head injury, stroke, and selected peripheral pathologies. Emphasis on comparing and contrasting facilitation techniques. Corequisite: PHTH458.
- PHTH449** ◆ (1.5)
Neuroscience II
Same as PHTH448 with an emphasis on clinical applications. Prerequisites: PHTH448 and 458. Corequisite: PHTH459.
- PHTH456** ◆ (1)
Applied Physiology Laboratory
Practical demonstration and experience with metabolic responses to exercise, testing procedures, exercise prescription, and experiment design. Corequisite: PHTH446.
- PHTH457** ◆ (1)
Neuroanatomy Laboratory
Study of prosected central and peripheral nervous tissues, models, and charts. Corequisite: PHTH447.
- PHTH458** (1)
Neuroscience I Laboratory
Clinical application, rehabilitation practice, and techniques applied to basic physiological and neurophysiological mechanisms specific to nervous system dysfunction. Clinical treatment of conditions affecting the nervous system, such as spinal cord injury, head injury, stroke, and selected peripheral pathologies. Emphasis on comparing and contrasting facilitation techniques. Corequisite: PHTH448.
- PHTH459** ◆ (1)
Neuroscience II Laboratory
Continuation of PHTH458. Prerequisites: PHTH448 and 458. Corequisite: PHTH449.

PHTH466

◆ (1.5)

General Medicine

Clinical techniques applied to the evaluation, treatment, and discharge planning of patients in general medical and acute-care settings. Emphasis on physical therapy intervention with relevant factors, management of pain and physical complications during medical treatment, and evaluation and treatment of special populations including wound and burn care. Corequisite: PHTH476.

PHTH469

◆ (1.5)

Applications of Educational Theory in Physical Therapy

Examines and applies educational theory to skills used by the

- PHTH538** (1.5)
Advanced Neuro Techniques
Advanced education in theory and clinical practice in the treatment of neurological dysfunction. Theories and clinical areas covered may include Neuro Developmental Technique (NDT), Motor Relearning Program (MRP), and other selected approaches. Focuses primarily on helping the student achieve advanced skills in transition from theory to clinical practice. Corequisite: PHTH548.
- PHTH544** (1)
Research Methods and Statistics Laboratory
Constructing research designs for specific hypotheses. Practice in the computation of statistical data using appropriate formulas. Practical applications of techniques in research and statistical computations including probability, normal distribution, chi square, correlations, and linear regressions. Repeatable. Corequisite: PHTH534.
- PHTH548** (1)
Advanced Neuro Techniques Laboratory
Clinical application, rehabilitation practice, and techniques applied to advanced clinical practice in the treatment of neurological dysfunction. Theories and clinical areas covered may include Neuro Developmental Technique (NDT), Motor Relearning Program (MRP), and other selected approaches. Corequisite: PHTH538.
- PHTH551, 552, 553** (4, 4, 4)
Clinical Affiliation, I, II, III
Advanced full-time clinical experience for 8 weeks each in a variety of professional practice settings. One of the 8-week affiliations must be in an inpatient setting. Thirty-six to forty hours per week.
- PHTH556** (1.5)
Pediatric Physical Therapy
Evaluation and treatment of pediatric patients. Corequisite: PHTH566.
- PHTH559** (1.5)
Sports Medicine and Advanced Orthopedics
Advanced understanding of orthopedic pathology of the spine and extremity joints, with attention to athletic injuries of these areas. Measurements covered include the pre-participation physical exam, designing conditioning programs, taping, equipment fitting, advanced first aid for evaluating and treating field injuries, and other selected orthopedic pathology. Corequisite: PHTH569.
- PHTH566** (1)
Pediatric Physical Therapy Laboratory
Practice and application of skills required in working with orthopedic and neurologically involved pediatric patients as well as pediatric patients that show developmental risk factors and/or delays. Corequisite: PHTH556.
- PHTH569** \$ (1)
Sports Medicine and Advanced Orthopedics Laboratory
Practice in advanced evaluation and treatment procedures for orthopedic pathology with special emphasis on athletic injuries. Practice of different exercise regimens and taping techniques. Corequisite: PHTH559.
- PHTH575** (1.5)
Biomedical Ethical Issues
Contemporary ethical issues are examined, including the relationships between peers, superiors, subordinates, institutions, clients, and patients. Issues are illustrated with real-life cases and related to Christian biblical presuppositions.
- PHTH585** (1.5)
Industrial Medicine
Gives a broad overview of occupational medicine with emphasis on evaluation and treatment procedures for industrial rehabilitation. An instructional block included on the prevention of work-related injuries with an evaluation of the workplace and the development of appropriate job descriptions. Corequisite: PHTH595.
- PHTH588** (1)
Professional Compendium
Summarization of previous or added learning experiences relative to contemporary issues in physical therapy. An overview of the new graduate's role and responsibility to his/her patients and their family, employer, and community in the expanding physical therapy profession.
- PHTH589** (1-2)
Professional Seminar
Weekly sessions in which students present and discuss formal case studies from clinical education experiences, including one-day modules on various topics with contemporary relevance.
- PHTH590** (1-4)
Topics in _____
Selected topics in physical therapy. Permission of department chair required. Repeatable. Specific prerequisites may be required for some subject areas.
- PHTH595** (1)
Industrial Medicine Laboratory
Observation, demonstration, and practice in the evaluation, treatment, and patient instruction procedures relating to occupational medicine. Corequisite: PHTH585.
- PHTH607** (1.5)
Women's Health
An advanced understanding of issues relating to the physical therapy assessment and intervention of women's health concerns. Clinical areas covered include pregnancy and childbirth, menopause, post-mastectomy and hysterectomy rehabilitation. Corequisite: PHTH617.
- PHTH615** (1.5)
Complementary and Aquatic Therapies
An overview of complementary therapies focusing on evaluation and treatment, and advanced aquatic therapy program design and intervention. Corequisite: PHTH625.
- PHTH617** (1)
Women's Health Laboratory
Advanced practice and application of clinical skills required in the physical therapy assessment and intervention of women's health concerns. Corequisite: PHTH607.
- PHTH625** (1)
Complementary and Aquatic Therapies Laboratory
Designed for the clinical application and practice of special techniques in complementary and aquatic therapies. Corequisite: PHTH615.
- PHTH648** (1-4)
Workshop

PHTH690 (1-4)

Independent Study

Individualized study and/or research in a specialized area under the guidance of an instructor. Permission from the department chair required prior to registration. Repeatable to 8 credits.

PHTH698 (1-2)

Research Project (topic)

Development of a physical therapy related research topic, thesis, and oral presentation.

Summer: Provides students with guidelines and supervision for

level practice. Increasing independence in clinical practice is expected with increased responsibilities in areas of program development and implementation, administration, and clinical management including staff supervision.

PHTH661 (2.5)

Clinical Pathology: General Medicine

Small group, problem-based learning course utilizing general medical, acute care, and postoperative patient case scenarios or pathologies to facilitate the integration of prior knowledge with new learning. Students review and apply basic and clinical science concepts to each case, formulating appropriate physical therapy examination and intervention strategies. Corequisites: PHTH671 and 681.

PHTH662 (3)

Clinical Pathology: Neurology I

Small group, problem-based learning course utilizing various neurological clinical cases to facilitate the integration of previous knowledge with new learning. Basic and clinical science principles are used to formulate appropriate examination and intervention strategies for the patient with neurological deficits.

Corequisite: PHTH661 (3) (Clinical Science)

Corequisite: PHTH661 (3) (Clinical Science)

- PHTH685** (2)
Clinical Issues Seminar: Orthopedics II
 Focused-topic study related to physical therapy management of the complex orthopedic patient with select axial musculoskeletal pathologies. Topics include chronic pain management, medical diagnostics, surgical intervention for the spine, differential diagnosis, and age-related pathologies. Corequisites: PHTH665 and 675.
- PHTH687** (1.5)
Advanced Therapy Workshop
 Concentrated instruction in advanced physical therapy patient care. Topics include cardiopulmonary rehabilitation, women's health, advanced manual therapy strategies, advanced electrotherapeutics and advanced handling techniques.
- PHTH688** (2.5)
Advanced Clinical Seminar
 Seminar/discussion on issues related to physical therapy care and the profession. Topics include preventive and wellness programs, physical therapy consultation, burn and wound care management, industrial rehabilitation and sports medicine.
- PHTH691** (2)
Research I
 Introduction to research methods and design; students develop critical reasoning skills necessary to read and evaluate current research literature. Issues related to sampling, control, validity, and reliability. Several parametric statistical procedures and the research proposal process.
- PHTH692** (1)
Research II
 A continuation of PHTH691; focuses on student identification and selection of a research proposal topic. Advanced statistical analysis discussed; also informed consent, writing techniques, funding acquisition, and presentation of findings. Corequisites: PHTH662, 672, 682.
- PHTH693** (1)
Research III
 Research proposal review, revision, and presentation. Students work with the research coordinator and individual faculty research advisors in preparation for completion of the research proposal document.
- PHTH531** (2.5)
NAIOMT Level I: Introduction to Fundamentals of Orthopedic Manual Therapy and Differential Diagnosis
 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 presented.
- PHTH532** (2.5)
NAIOMT Level II: 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.
- PHTH533** (2.5)
NAIOMT Level II: 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 and effective treatment techniques for common injuries and mechanical dysfunctions.
- PHTH539** (2.5)
Clinical Research
 Presents basic research concepts in a format appropriate to both consumers of research literature and students planning to initiate
 Clinic4Level II: Intermediate Lower Quadrantco[tPs D -ipuling pns.
Educat4l Research

POST-PROFESSIONAL PROGRAMS

- PHTH507** (2.5)
Functional Anatomy/Neuroanatomy
 A review of cadaver anatomy with corresponding lectures on the main functional muscle groups of the extremities and back. The spine, upper and lower extremity joints and soft tissues are covered. In addition, neuroanatomy relevant to physical therapy and sports medicine are discussed.
- PHTH529** (2.5)
Education Methods and Materials
 Examines and applies education theory to skills used by the healthcare provider in the classroom, community, and clinical facility. Topics include the educational role of the healthcare provider, the learning process, the taxonomies of learning, learning styles, modality strengths, multiple intelligences, literacy levels, instructional technology, and teaching strategies.

PTH600 (2)

Healthcare Systems, Policies & Reimbursement

Discussion and analysis of historical and current trends in health-care delivery and their impact on policy development. Application of management strategies and how healthcare practitioners can effect change.

PTH605 (2)

Cultural Influences on Healthcare Delivery

Survey of ethnic and cultural diversity issues, focusing on the insight essential to effective healthcare delivery to individuals in minority ethnic groups and cultures. Incorporates communication and assessment skills necessary to positively effect the practitioner-patient interaction and enhance patient compliance.

PTH615 (2.5)

Clinical Pharmacology

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.

PTH619 (2)

Educational Methods & Resources

Examines and applies relevant and effective teaching methods and resources to educate patients, family, care givers, staff, students, and other healthcare providers.

PHTH629 (2)

Guide to Physical Therapist Practice

Introduction to the content of the *Guide to Physical Therapist Practice* and its multiple applications in the clinical setting: current terminology; justification for plan of care, documentation of goals and expected outcomes, the use of practice patterns, and the integration of the concepts of the disablement model into clinical practice.

PTH630 (3)

Biostatistics & Research Design

Examines and applies appropriate research design and statistical methods relevant to healthcare research with emphasis on clinical practice. Integrated throughout the course, outcome research will be analyzed and related to evidence-based physical therapy practice.

PTH646 (2)

Spirituality in Healthcare

A discussion of spiritual values from a Christian perspective, how

PTH537 (3)

NAIOMT Level II: 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 (3)

NAIOMT Level II: 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 and effective treatment techniques for common injuries and dysfunctions.

PTH540 (3)

Advanced Kinesiology

A study of function and structure of the human body related to movement, with a particular focus on biomechanics. Includes how anatomic structures react in an isolated and integrated fashion when placed under the influence of forces in both a static and dynamic environment.

PTH546 (3)

NAIOMT Level III: Advanced Upper Quadrant

Builds on the techniques learned in Level II and helps the student understand the kinetic chain interrelationships 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 (3)

NAIOMT Level III: Advanced Lower Quadrant

Builds on the techniques learned in Level II and helps the student understand the kinetic chain interrelationships 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 (3)

NAIOMT Level IV: High Velocity Manipulation

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

PTH549 (3)

Principles of Contemporary Leadership

Theory and application of complexity sciences to organizational management; exploration of key leadership roles and changing

home program material for patients. Neuromotor re-education concepts and options will be experienced for each region.

PTH632 (1.5)

Soft Tissue Management: Level II

Builds on concepts and techniques introduced in Level I. and techniques introduced in Level I. Adds SCS for distal extremity joints, full body motion analysis and SCS screen from which a plan for joint release and neuromotor re-education is developed. More neuromotor re-education exercises and options, and identifying and correcting vector(s) of traumatic injury. Prerequisite: PTH631.

PTH641 (2)

Diagnosis & Treatment of Movement Impairment Syndromes: Level I

Lecture/lab course covers concepts and principles of movement system balance (MSB) theory and its relationship to alteration in neuromusculoskeletal function and movement impairments of the shoulder, trunk, hip, and knee. Discussion and demonstrations focus on examination methods to identify movement impairment syndromes, the importance and means of developing a precise therapeutic exercise program and correcting faculty posture and movement associated with functional activities.

PTH642 (2)

Diagnosis & Treatment of Movement Impairment Syndromes: Level II/III Upper Quarter

Lecture/lab course provides a review and update of concepts and principles of the MSB theory and its relationship to musculoskeletal pain syndromes. Designed to improve skill in performance of examination procedures, recognition of signs and symptoms of upper quarter movement (including shoulder and neck) impairment movement syndromes. Emphasizes selection and performance of corrective exercises based on results of the examination. Prerequisite: PTH641.

PTH646 (2)

Spirituality in Healthcare

Discussion of 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 and addressing the spiritual needs of patients/clients, family members, and ancillary medical staff in a professional environment.

PTH697 (2)

Independent Learning Contract

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.

PTH718 (2)

Clinical Screening & Differential Diagnosis

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 physical therapy practice are addressed. Enhances professional communication with other healthcare practitioners included in the referral process.

PTH730 (3)

Medical Diagnostics

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 (2)

Evidence-based Practice & Decision Making

Applies the knowledge of prognosis as well as a theoretical framework to develop patient goals and functional outcomes. Sound clinical reasoning and decision-making during physical therapy intervention is based upon scientific evidence and established patient outcome studies.

PTH750 (2)

Professional Communication & Consulting

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

PTH798 (4-6)

Capstone Experience (Topic)

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