Course Descriptions:

**PHTH 501 Clinical Anatomy/Physiology I (5)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course is the first of three focusing on the structure of the human body and its related function. This course is designed to provide the student with an opportunity to learn anatomical structures and the functional relationships of the structures to each other. The major emphasis of this course will be on the structures contained in the upper and lower extremities. Clinical correlations will be presented relating the anatomical structures discussed to the practice of physical therapy. The course is heavily weighted toward laboratory dissection. The physiology of muscle, nerve and bone will be discussed in relation to the function of the anatomical structures studied during the course.

**PHTH 502 Clinical Anatomy/Physiology II (3)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course is the second of three focusing on the structure of the human body and its related function. This course is designed to provide the student with an opportunity to learn anatomical structures and the functional relationship of the structures to each other. The major emphasis of this course will be on the structures contained in the spine. Clinical correlations will be presented relating the anatomical structures discussed to the practice of Physical Therapy. The course is heavily weighted toward laboratory dissection. Physiological function of cells and cellular components of the nervous system emphasizing integrative neurophysiology, sensory physiology and the autonomic nervous system will be discussed.

**PHTH 503 Clinical Anatomy/Physiology III (3)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course is the third of three focusing on the structure of the human body and its related function. This course is designed to provide the student with an opportunity to learn anatomical structures and the functional relationships of the structures to each other. The major emphasis of this course will be structures contained in the head and neck, the thoracic cavity, the abdomen and the pelvis. The physiology of the special senses of taste, smell, sight and hearing will be discussed. The physiology of the cardiovascular system including the heart and circulatory system, of the lungs and the pulmonary system and of the gastrointestinal system will be discussed in relation to the function of the anatomical structures studied during the course.

**PHTH 533 Functional Anatomy I (5)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This is the first of two courses which focus on the study of human motion with emphasis on biomechanics and functional anatomy and their relationship to the fundamental understanding of exercise concepts and musculoskeletal evaluation with application to the practice of physical therapy. Studies will include the osteokinematics, arthrokineamtics and assessment of accessory joint movements of the upper and lower extremities. Musculoskeletal evaluation will focus on manual muscle testing, goniometry and surface anatomy to include palpation.

**PHTH 534 Functional Anatomy II (3)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This is the second of two courses which focus on the study of human motion with emphasis on biomechanics and functional anatomy and their relationship to the fundamental understanding of exercise concepts and musculoskeletal evaluation with application to musculoskeletal dysfunction. Studies will include the osteokinematics, arthrokineamtics and assessment of accessory joint movements of the spine and temporomandibular joint. Musculoskeletal evaluation of the spine and head will include manual muscle testing, goniometry, palpation of surface anatomy structures and posture with reference to the whole body.

**PHTH 536 Physical Therapy Practice Seminar I (2)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course examines the professional role of the physical therapist, the American Physical Therapy Association, the history of the profession, Standards of Practice, the Code of Ethics, licensure issues, current issues facing the physical therapy practitioner and the law related to physical therapy.

**PHTH 538 Therapeutic Exercise and Interventions (4)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course includes concepts and practice with therapeutic exercise and interventions, including passive, active assistive, active and resistive range of motion, strengthening programs, stretching exercises, mobilization techniques for the extremity joints, relaxation exercises and gait training. Students will develop and write home programs, design exercise programs for therapeutic purposes and critically analyze interventions.

**PHTH 540 Principles of Evidence-Based Practice I (1)**
Cross-listed: OCTH 520.
Note: graded Pass/No Credit.
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This is the first of three courses designed to introduce the student to evidence-based practice and the process of critical inquiry. These courses will prepare the student to become a knowledgeable consumer of research and the professional literature as it relates to the practice of physical therapy. In this course the student will develop competence in identifying, locating, retrieving, understanding and applying the principles of research to the practice of physical therapy.

**PHTH 541 Principles of Evidence-Based Practice II (2)**
Prerequisites: All courses in physical therapy are restricted to students accepted into the program. The student must successfully complete all coursework each quarter to progress to the next quarter in the program.

This is the second of three courses designed to introduce the student to evidence-based practice and the process of critical inquiry. These courses will prepare the student to become a knowledgeable consumer of research and the professional literature as it relates to the practice of physical therapy. In this course the student will develop an understanding of research design, research methods and statistical applications related to critical inquiry in physical therapy.

**PHTH 542 Principles of Evidence-Based Practice III (2)**
Note: graded Pass/No Credit.
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This is the third of three courses designed to introduce the student to evidence-based practice and the process of critical inquiry. These courses will prepare the student to become a knowledgeable consumer of research and the professional literature as it relates to the practice of physical therapy. In this course the student will develop oral presentation skill through the preparation and presentation of a group project on a specific outcome measure.

**PHTH 546 Integumentary Therapeutics (4)**
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

This course provides the student with classroom discussion and laboratory experiences on the physiological bases for and clinical applications of physical
therapy interventions applied to the integumentary system. These include massage, superficial and deep heat, ultraviolet radiation, cryotherapy, aquatic therapy, hydrotherapy and basic wound management. Foundational client management skills such as positioning, draping, transfers, universal precautions and examination of vital signs are also included.

**PHTH 547 Professional Development Seminar (2)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

The purpose of this seminar is to provide students with opportunities to explore the responsibilities and behaviors expected of the physical therapist and to assess their own progress toward professional development. Included are presentations by master clinicians and group discussions with experts to explore issues of professional development.

**PHTH 553 Educational Aspects of Physical Therapy (2)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This course will introduce the student to the role of the physical therapist as an educator. The course includes theories of teaching and learning, the importance of learning styles, behavioral objectives, evaluation of teaching, motivation and compliance and adult learners. The differences in educating multicultural patient populations will be discussed. Clinical teaching will be done in role-playing situations. Students will prepare and present a teaching unit to a community group.

**PHTH 554 Diagnosis in Physical Therapy (4)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This course will introduce students to screening for referral in physical therapy practice, with particular emphasis on the patient interview process and using health history as a screening tool. The course will provide an overview of review of systems and screening for disease to facilitate the students’ knowledge of signs and symptoms that mimic neuromusculoskeletal conditions, and warrant referral to a primary care provider. Fundamentals of musculoskeletal imaging will be introduced relative to the screening process.

**PHTH 561 Clinical Education Seminar I (1)**
*Note: graded Pass/No Credit.*

*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This is the first of six clinical education seminars. The purpose of these seminars is to prepare students for the clinical internships. Included in *Clinical Education Seminar I* are an introduction to the clinical education program, procedures for internship site selection, introduction to the generic abilities and education in the Occupation Health and Safety Administration requirements.

**PHTH 562 Clinical Education Seminar II (1)**
*Note: graded Pass/No Credit.*

*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This is the second of six clinical education seminars. The purpose of these seminars is to prepare students for the clinical internships. Included in *Clinical Education Seminar II* are discussions on clinical education, the generic abilities and AIDS education.

**PHTH 563 Clinical Education Seminar III (1)**
*Note: graded Pass/No Credit.*

*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This is the third of six clinical education seminars. The purpose of these seminars is to prepare students for the clinical internships. Included in *Clinical Education Seminar III* are discussions of the role of the clinical instructor, characteristics of an effective clinical instructor and an effective student, the clinical performance instrument and cardiopulmonary resuscitation.

**PHTH 569 Health Care Systems I (2)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This course is the first of two courses that address health care delivery issues. This course explores and compares models of health care systems. Included are the issues of managed care, multiprovider systems, marketing, availability and accessibility of health care.

**PHTH 571 Neuroscience (5)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

The structure and function of the central nervous system (CNS) are presented in this foundational course in physical therapy. The relationships between the somatosensory system, spinal cord and brainstem reflexes and motor systems are presented. Students will also learn how the CNS develops and the consequences of malformations of the CNS during development. Clinical signs and symptoms of specific CNS pathology will be presented and related to patients with movement disorders that receive physical therapy services.

**PHTH 572 Applied Neuroscience (4)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This course provides the student with the opportunity to apply principles of neuroscience, anatomy and biomechanics to the control of sensation, posture and balance, motor control in disordered systems and motor learning. Students will learn to perform clinical sensory, reflex and cranial nerve examinations, electrophysiologic examinations, examinations of posture, balance, spasticity and rigidity. Students will also learn to apply selected physical therapy interventions directed at modulation of the sensory and motor systems.

**PHTH 576 Pharmacology (2)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

The course provides a basic knowledge of pharmacology for the physical therapist in order to incorporate the effects of drugs into an appropriate design and implementation of the patient care process.

**PHTH 581 Clinical Internship I (5)**
*Note: graded Pass/No Credit.*

*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

*Clinical Internship I* consists of a full time educational experience in a clinical setting for 5 (five) weeks during summer quarter of the first year of the DPT Program. The primary purposes are to gain experience with examination, evaluation and intervention skills learned in the first academic year, practice and demonstrate developing level behavioral criteria in the generic abilities and interact with patients and health care professionals in the clinical environment.

**PHTH 596 Musculoskeletal Systems I (5)**
*Prerequisites: all courses in physical therapy are restricted to students accepted into the program.*

This course is the first of three on examination, evaluation, and intervention of the musculoskeletal system. Content includes, but is not limited to, fundamental orthopedic principles, scanning examinations; diagnosis and intervention of clients with musculoskeletal conditions of the cervical spine, thoracic spine/rib and
shoulder; and musculoskeletal imaging, fractures, and bone pathology. Emphasis is on differential diagnosis, clinical decision making, and interventions such as region specific musculoskeletal manual therapy (e.g., mobilization, manipulation, muscle energy), therapeutic exercise, therapeutic modalities and orthotics.

**PHTH 617 Musculoskeletal Systems II (5)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is the second of three on examination, evaluation and intervention of the musculoskeletal system. Content includes, but is not limited to, scanning examinations; diagnosis and intervention of clients with musculoskeletal conditions of the elbow, wrist/hand, lumbosacral spine, hip and knee; and musculoskeletal imaging, fractures and bone pathology. Emphasis is on differential diagnosis, clinical decision making and interventions such as region specific musculoskeletal manual therapy (e.g., mobilization, manipulation, muscle energy), therapeutic exercise, therapeutic modalities and orthotics.

**PHTH 618 Musculoskeletal Systems III (4)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is the third of three on examination, evaluation and intervention of the musculoskeletal system. Content includes, but is not limited to, diagnosis and intervention of clients with musculoskeletal conditions of the ankle/foot, sacroiliac, craniovertebral region and temporomandibular regions; musculoskeletal imaging, fractures and bone pathology; special topics in spinal manipulation; and prosthetics. Emphasis is on differential diagnosis, clinical decision making and interventions such as region specific musculoskeletal manual therapy (e.g., mobilization, manipulation, muscle energy), therapeutic exercise, therapeutic modalities and orthotics.

**PHTH 626 Neuromuscular Systems I (5)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course utilizes a client-centered (case study) approach to provide the student with the knowledge and skills to manage a client with peripheral or central nervous system disorder. This course includes, but is not limited to, the care of clients with peripheral neuropathy, cranial nerve dysfunction, complex regional pain syndrome (reflex sympathetic dystrophy syndrome), disorders of the basal ganglia, demyelinating diseases of the central nervous system, cerebellar dysfunction, traumatic brain injury, vestibular dysfunction, central nervous system infections and cerebrovascular accident.

**PHTH 627 Neuromuscular Systems II (3)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course focuses on the patient/client with spinal cord injury. Examination of this patient/client with multiple system involvement, medical systems review, therapeutic interventions, multi-disciplinary approaches to care, functional outcomes, technology and current research are all addressed.

**PHTH 628 Neuromuscular Systems III (4)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course utilizes a client-centered (case study) approach to provide the student with the knowledge and skills to manage a pediatric client with a disability. Theories of motor development, motor milestones and standardized assessments will be studied to provide a basis for understanding movement dysfunction in children with disabilities.

**PHTH 634 Exercise Physiology (3)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

Study of the acute and chronic effects of exercise and work on the human body with emphasis on the processes that control and regulate important properties of living systems. Topics include the fundamentals of human energy, nutrition, measurement of human energy expenditure, the cardiovascular system, the pulmonary system, the neuromuscular system, hormone factors affecting physiological function, body composition and the effects of aging. The application of exercise for fitness and wellness in the practice of physical therapy will be emphasized.

**PHTH 635 Cardiopulmonary Systems (4)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course utilizes a client-centered (case study) approach to provide the student with the knowledge and skills to enable him/her to manage a client with cardiac and/or pulmonary system pathology. This course includes but is not limited to the care of clients with angina pectoris, coronary artery disease, congestive heart failure, mitral valve stenosis, myocardial infarction, post-coronary artery bypass graft surgery, heart and heart/lung transplantation, chronic obstructive pulmonary disease, bronchitis, cystic fibrosis, asthma, restrictive lung disease, pneumonia, atelectasis, pneumothorax, hemothorax and pulmonary embolus.

**PHTH 636 Physical Therapy Practice Seminar II (2)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

The role of physical therapy in health care will be discussed. Speakers will present information on health care delivery, contrasting urban and rural areas. Community agencies, clinical decision making/ethics and the role of other health care professionals will be introduced. Leadership/advocacy issues will be addressed as they relate to these topic areas.

**PHTH 639 Topics in Physical Therapy (3)**
**Prerequisites:** All courses in physical therapy are restricted to students accepted into the program. The student must successfully complete all course work each quarter to progress to the next quarter in the curriculum.

This course will provide the student with opportunities to explore specific topic areas in depth using the four practice patterns described in the Guide to Physical Therapist Practice: musculoskeletal, neuromuscular, cardiopulmonary and integumentary patterns. Specific course content will be offered in a variety of practice arenas to provide the participant with an opportunity to increase knowledge and skills in physical therapy practice. The behaviors and attitudes expected at the doctoral level will also be addressed.

**PHTH 641 Multiple Systems (2)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

The course applies an analytical approach to the treatment of patients/clients with multiple systems involvement and requires integration of aspects of learning from previous courses. Emphasis is placed on comprehensive case study management of clients with psychiatric disorders, immunologic disorders, cancer, eating disorders, women's health problems, complex medical problems, metabolic disorders, hematologic disorders and medical emergencies. The topic of wellness is also explored.

**PHTH 646 Integumentary Systems (3)**
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This course provides the student with the knowledge and skills to enable him/her to manage the client with integumentary disorders. The course includes, but is not limited to, the care of clients with burns, wounds, peripheral vascular disease and diabetes.

**PHTH 661 Clinical Education Seminar IV (1)**
This is the fourth of six clinical education seminars. The purpose of these seminars is to prepare students for the clinical internships. Included in Clinical Education Seminar IV are discussions on the first clinical internship, the generic abilities, student responsibilities, communication, professional behavior and internship expectations.

**PHTH 662 Clinical Education Seminar V (1)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the fifth of six clinical education seminars. The purpose of these seminars is to prepare the students for the clinical internships. Included in Clinical Education Seminar V are active learning opportunities with physical therapist assistant students, chart review, discussion on professionalism and goal writing.

**PHTH 663 Clinical Education Seminar VI (1)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the sixth of six clinical education seminars. The purpose of these seminars is to prepare students for the clinical internships. Included in Clinical Education Seminar VI are the selections for clinical internships, discussion of expectations and the syllabi for the ten-week internships, discussions of legal and ethical issues that may occur during clinical internships and participation in a team conference on a case-based patient.

**PHTH 665 Physical Therapy Administration (3)**  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

Upon completion of this course, the student will be able to develop, administer and manage a physical therapy practice, utilizing the human and material resources available, for effective delivery of services.

**PHTH 669 Health Care Systems II (3)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** All courses in physical therapy are restricted to students accepted into the program. The student must successfully complete all course work each quarter to progress to the next quarter in the curriculum.

This is the second of two courses related to the delivery of health care services, specifically physical therapy services. This course focuses on professional development, financial, legal and humanitarian issues, and service as a professional expectation.

**PHTH 675 Clinical Research I (2)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the first of four courses designed to guide the student through the process of contributing to the body of knowledge in physical therapy through the preparation of clinical case reports. In this course, students will prepare a case report based upon the case history of a patient they provided intervention to during Clinical Internship I. Students will work with faculty mentors to prepare the case report and will present the case report to faculty and clinicians in a platform format presentation.

**PHTH 680 Geriatrics (2)**  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

The course will provide physical therapist students with opportunities to discuss the demographics and theories of aging, examine personal attitudes on aging, contrast normal and pathological aging in patients presented from long term care facilities and the community, design a physical therapy plan of care and create an exercise program for an elderly client.

**PHTH 770 Clinical Research II (3)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the second of four courses designed to prepare the student to participate in clinical research in the field of physical therapy. In this series of courses students will prepare a multiple case report, based upon patients they identified during their full-time clinical internships. Students will work with an assigned faculty mentor to prepare a written multiple case report. Students will present their multiple case reports to a committee of faculty members as part of their final project.

**PHTH 771 Clinical Research III (3)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the third of four courses designed to prepare the student to participate in clinical research in the field of physical therapy. In this series of courses students will prepare a multiple case report, based upon patients they identified during their full-time clinical internships. Students will work with an assigned faculty mentor to prepare a written multiple case report. Students will present their multiple case reports to a committee of faculty members as part of their final project.

**PHTH 772 Clinical Research IV (3)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

This is the fourth of four courses designed to prepare the student to participate in clinical research in the field of physical therapy. In this series of courses students will prepare a multiple case report, based upon patients they identified during their full-time clinical internships. Students will work with an assigned faculty mentor to prepare a written multiple case report. Students will present their multiple case reports to a committee of faculty members as part of their final project.

**PHTH 780 Clinical Internship II (10)**  
**Note:** graded Pass/No Credit.  
**Prerequisites:** all courses in physical therapy are restricted to students accepted into the program.

**Clinical Internship II** consists of a full time educational experience in a clinical setting for 10 (ten) weeks. The primary purposes are to gain experience in an acute care, rehabilitation or specialty setting, demonstrate progress toward entry-level behavioral criteria in the generic abilities and clinically apply skills and knowledge attained in the first two years of the program. Upon completion of the internship, the student will demonstrate performance at a level of professional clinical competency consistent with the expectations of a physical therapist in a similar practice setting (acute care, rehabilitation or specialty setting).

**PHTH 781 Clinical Internship III (10)**
Clinical Internship III consists of a full-time educational experience in a clinical setting for 10 (ten) weeks. The primary purposes are to gain experience in an acute care, rehabilitation or specialty setting, demonstrate progress toward entry-level behavioral criteria in the generic abilities and clinically apply skills and knowledge attained in the first two years of the program. Upon completion of the internship, the student will demonstrate performance at a level of professional clinical competency consistent with the expectations of a physical therapist in a similar practice setting (acute care, rehabilitation or specialty setting).

PHTH 782 Clinical Internship IV (10)

Note: graded Pass/No Credit.
Prerequisites: all courses in physical therapy are restricted to students accepted into the program.

Clinical Internship IV consists of a full-time educational experience in a clinical setting for 10 (ten) weeks. The primary purposes are to gain experience in an acute care, rehabilitation or specialty setting, demonstrate entry-level behavioral criteria in the generic abilities and clinically apply skills and knowledge attained in the first two years of the program. Upon completion of the internship, the student will demonstrate performance at a level of professional clinical competency consistent with the expectations of a physical therapist in a similar practice setting (acute care, rehabilitation or specialty setting).