

# PHYSICAL THERAPY (PT)

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## **PT-500 Essential Skills I (2 credits)**

This course introduces the student to clinical skills essential for practice entry. Students will receive instruction in evaluation skills including manual assessment of muscle strength, joint mobility, vital signs, perceived exertion, transfer training, gait training, use of assistive devices and functional examination including upper and lower quadrant screening. Related concepts include professional communication (verbal and non-verbal); documentation; and patient, family and community education. Format: lecture, discussion, group and individual presentations, with possible fieldwork.

## **PT-500L Essential Skills I Lab (2 credits)**

This course introduces the student to clinical skills essential for practice entry. This course presents basic examination, evaluation skills and intervention strategies for management of patients with emphasis on subacute level of care. Students will receive instruction in examination skills including evaluation of muscle strength, joint mobility, vital signs, perceived exertion, transfer training, gait assessment and training, and functional examination including upper and lower quadrant screening. Lab experiences include skill development in goniometric, manual muscle testing, vital signs, perceived exertion, positioning, draping, transfer and gait training and wheelchair measurement and mobility. Fieldwork experiences may be included.

## **PT-502 Pathophysiology for Physical Therapists (2 credits)**

Knowledge of the pathology of disease has always stood as one of the fundamental prerequisites to safe and effective health care practice. This course is an introduction to the basic principles of human pathology with emphasis on disease processes and their pathophysiology, etiology, and signs and symptoms. This course will familiarize the student with how the systems of the body function and malfunction in disease with regard to healing, inflammation, infection, immune response, and neoplasia. Most importantly, you will learn the implications of these pathologic conditions on the physical therapist.

## **PT-503 Clinical Orientation Seminar I (1 credits)**

This course is presented in a seminar format and is essential for the planning and management of the Clinical Education portion of the physical therapy curriculum. Policies and procedures will be reviewed as will the Clinical Education Manual. Topics of relevance to the clinical education portion of the program will be discussed. Clinical site selection for the first three clinical experiences will take place during this course.

## **PT-504 Clinical Orientation Seminar II (1 credits)**

This course is presented in a seminar format and is essential for the planning and management of the Clinical Education portion of the physical therapy curriculum. Policies and procedures for clinical education will be reviewed. Topics of relevance to the clinical education portion of the program will be discussed. The APTA Clinical Performance Instrument will be introduced. Clinical professional preparation for clinical fieldwork will occur in this course.

## **PT-505 Intro PT and Health Care Systems (2 credits)**

This course introduces the student to knowledge essential for practice entry. Discussion topics include health care systems (dominant and world models), definition of the health care professional in general, and specifically the P.T., including the scope of practice, the APTA, Standards of Practice, the Practice Guide, and Code of Ethics. Class discussions are an important part of this class.

## **PT-506 Physiology of Therapeutic Exercise (2 credits)**

This is the didactic portion of PT 506. The contemporary physical therapist utilizes exercise as a therapeutic agent in the clinical management of a variety of pathological conditions. The student requires a firm and comprehensive foundation in current exercise-related knowledge and concepts which provide the scientific bases for rational evaluation of relevant physiological parameters in patients, and for the design, monitoring and modification of specific exercise training procedures devised for dysfunctional conditions. The major objective of this course is to introduce the physiological bases for exercise. The emphasis will be on the study of normal human movement. The latest scientific and theoretical information will be examined. The course includes didactic and small group experiences.

## **PT-506L Physiology of Therapeutic Exercise Lab (1 credits)**

This is the laboratory component of PT 506. The contemporary physical therapist utilizes exercise as a therapeutic agent in the clinical management of a variety of pathological conditions. The student requires a firm and comprehensive foundation in current exercise-related knowledge and concepts which provide the scientific bases for rational evaluation of relevant physiological parameters in patients, and for the design, monitoring and modification of specific exercise training procedures devised for dysfunctional conditions. The major objective of this course is to introduce the physiological bases for exercise. The emphasis will be on the study of normal human movement. The latest scientific and theoretical information will be examined. The course involves laboratory experiences.

## **PT-510 Essential Skills II (2 credits)**

This course, in conjunction with knowledge and skills acquired in Essential Skills I, introduces clinical skills essential for practice entry. Practice competencies will include but are not limited to integumentary assessment (e.g. wound care), the therapeutic use of electro-modalities, massage, edema control, and functional exercise. Demonstration of competency in essential clinical skills emphasizes maintaining a safe and therapeutic environment, professional communication and behaviors, and effective client education. Format: lecture and small group tutorial.

## **PT-510L Essential Skills II Lab (1 credits)**

Practice competencies will include but are not limited to the therapeutic use of electro-modalities, massage, wound management, edema control, and functional activity assessments. Demonstration of competency in essential clinical skills emphasizes maintaining a safe and therapeutic environment, professional communication and behaviors, and effective client education. Format: lab and field observations.

**PT-513 Orthopedic Physical Therapy I (3 credits)**

The course is designed to develop student skills in the areas of musculoskeletal examination, evaluation and intervention for patients with dysfunction of the spine and/or its related structures. Competencies to be acquired include the ability to effectively: .Identify physical examination procedures related to various spinal abnormalities. .Evaluates examination findings in order to appropriate categorize patients into movement based classification systems and when necessary identify a pathoanatomic diagnosis. .Develop a comprehensive plan of care for client management based on, patient intervention strategies presented will include but are not limited to instruction in techniques for patient education, referral/consultation, manual therapy(thrust and non-thrust manipulation, soft tissue manipulation, muscle energy techniques). Exercise prescription, spinal traction, and indications for use of modalities/physical agents. An understanding of the functional anatomy of spinal structures will be emphasized as they relate to patient management in orthopedics.

**PT-513L Orthopedic I Lab (2 credits)**

This course presents examination, evaluation and intervention strategies for management of clients presenting with musculoskeletal dysfunction of the spine and its related structures. The emphasis of this laboratory is on the development of clinical hands on skills for the effective and efficient performance of client examination, evaluation and interventional strategies as well as the synthesis of examination finding in the implementation of a plan of care. Lab experiences include skill development in specialized manual orthopedic approaches (thrust & non-thrust manipulation). Therapeutic exercise, patient case management, and problem solving techniques founded on evidence-based practice. An emphasis is placed on case-based instruction.

**PT-513S Orthopedic I Seminar (1 credits)**

This seminar is designed to provide students with the opportunity to apply skills related to the examination, evaluation, and management of disorders associated with neuromusculoskeletal dysfunction of the spine. Simulated patient demonstrations, video, and written clinical cases will be analyzed and evaluated by participating students in small group discussions and online chat sessions. Through the synthesis of knowledge and skills presented in PT 513 Orthopedic Lecture and Laboratory, students will formulate a physical therapy diagnosis and create evidence based treatment plans for effective patient management.

**PT-514 Integumentary Examination & Intervention (2 credits)**

This course will provide an in depth examination of the integumentary system including wound healing and risk factors associated with pathology to the integumentary system. Physical therapy examination techniques and interventions are included.

**PT-515 Professional Development I (1 credits)**

This course examines the development of effective communication skills that are essential for effective patient/practitioner interaction. Along with verbal and non-verbal skills, this course facilitates self-awareness, multicultural awareness, and awareness of current professional issues as they apply to PT practice, the management of health care, and medico-legal concerns.

**PT-517 Pain Neuroscience Education (1 credits)**

This course presents evaluation and treatment strategies for management of chronic neuromusculoskeletal problems. Format includes lecture, demonstration, supervised lab practice and problem solving. This clinical seminar component of the course integrates theory and clinical practice, and provides for demonstration and feedback of selected interventions. Course instructor directs topic-focused discussion and problem-solving sessions and evaluates and provides feedback.

**PT-518 Biomechanics and Kinesiology for PT (2 credits)**

This is the didactic portion of PT 518. The contemporary physical therapist plays a major role in prevention, evaluation and clinical management of motion dysfunctions associated with developmental disorders and other forms of pathology. Students require a comprehensive understanding of basic biomechanical and kinesiological principles as a foundation for analytical investigation of movement-related conditions. Fundamental concepts are progressively integrated with and applied to total body function through laboratory analysis of human posture and complex body motions. Included in this course will be an overview to the science of human movement study. Basic mechanics, biomechanics, kinematics and kinetics will be examined. Kinesiology of normal joints, posture, head, neck and trunk movement will be emphasized. The normal kinesiological aspects of specific joints and movement patterns will be analyzed. Included will be a detailed examination of normal human walking gait as well as pathological gait patterns. This course included lecture experiences.

**PT-518L Biomechanics and Kinesiology Lab (1 credits)**

This is the laboratory portion of PT-518, The contemporary physical therapist plays a major role in prevention, evaluation and clinical management of motion dysfunctions associated with developmental disorders and other forms of pathology. Students require a comprehensive understanding of basic biomechanical and kinesiological principles as a foundation for analytical investigation of movement-related conditions. The course is organized to illustrate general principles of structure and function that can be applied in subsequent study of individual joint complexes. Fundamental concepts are progressively integrated with and applied to total body function through laboratory analysis of human posture and complex body motions. Included in this course will be an overview to the science of human movement study. Basic mechanics, biomechanics, kinematics, kinetics and functional anatomy will be examined. Kinesiology of normal joints, posture, head, neck and trunk movements will be emphasized. Both normal and pathological movement patterns will be analyzed. Included will be a detailed examination of normal human walking gait as well as pathological gait patterns. This course utilizes experiences.

**PT-519 Lifespan Development (1 credits)**

This course examines physical, cognitive, and psychosocial aspects of normal infancy through adolescent human development.

**PT-519L Lifespan Development Lab (1 credits)**

This laboratory section provides the foundation for the understanding of normal development from birth through adolescents. This lab will encompass the assessment of developmental reflexes, righting and equilibrium responses, stages of motor control and fundamental movement patterns. Laboratory experiences include skill development in specialized testing techniques and observation of normal development.

**PT-520 Disability Throughout the Lifespan (2 credits)**

This course examines physical, cognitive, and psychosocial aspects of normal human development from adolescence through end of life as they relate to physical therapy practice. Patient management for prevention, health promotion, fitness and health risks related to aging will be explored.

**PT-520L Disability Throughout the Lifespan Lab (1 credits)**

This laboratory section provides the foundation for the understanding of functional testing in the field of Geriatrics and experience interactions with individuals in the later stages of life. Laboratory experiences include skill development in specialized testing techniques and observation of and communication with elderly individuals.

**PT-522 Functional Anatomy (2 credits)**

This is the didactic portion of PT-512. The physical therapist must have a strong understanding of human anatomy and its relationship to both normal functional movement as well as dysfunction of the neuromusculoskeletal system in order to effectively examine, evaluate, and provide interventions for their clients in a clinical practice setting. This course is organized to build upon the knowledge students acquired in BIO-639: Human Gross Anatomy through a region by region detailed analysis of specific anatomic structures and their function as relates to clinical physical therapy practice. Basic mechanics, biomechanics, kinematics, kinetics and functional anatomy of the spine and its related structures as well as the extremities will be examined. Students will be introduced to normal imaging on plane film x-ray, MRI and CT.

**PT-522L Functional Anatomy Lab (1 credits)**

This is the laboratory component PT-512. The contemporary physical therapist requires advanced skills for the palpation and identification of specific anatomic structures related to the examination, evaluation and application of interventions for the clinical management of clients with neuromusculoskeletal dysfunction. This course is designed to build upon knowledge acquired in BIO-639: Human Gross Anatomy by further developing the students' ability to perform both superficial and deep palpation of selected anatomic structures related to clinical practice in physical therapy. Students are also introduced to basic neuromusculoskeletal examination procedures and their clinical application and interpretation as relates to functional anatomy and normal human movement and structure.

**PT-525 Community Health & Wellness I (1 credits)**

This online course is designed to plan for a community health project which will be conducted as part of PT-526 and PT-526L. Applications of health promotion, fitness, wellness, and evidence-based theories influencing health behavior change, motivation and learning will be reviewed. Screening, health education, program planning, awareness of cultural differences, and traditional and nontraditional strategies for health promotion and wellness will be discussed. Applications to physical therapist patient/client management will be reinforced through patient/client and community health scenarios. By the end of the course, students will have identified a specific community health project they will conduct as part of PT-526 and PT-526L.

**PT-526 Community Health & Wellness II (1 credits)**

This lecture course will discuss concepts for planning, implementing, and evaluating community health promotion programs. National physical activity guidelines and related national goals and objectives will be taught. The role of physical activity in chronic disease prevention will be reviewed using epidemiological community health publications. Physical activity applications to physical therapy will be illustrated through guest lectures/podcasts/articles by PT leaders in the field, and serve to reinforce strategies for successfully conducting the community health project.

**PT-526L Community Health & Wellness II Lab (1 credits)**

Students will work with a PT faculty lab instructor to integrate the concepts of prevention, health promotion, fitness and wellness to individuals, groups and/or the community by conducting a community health project. This course will reinforce and advance concepts learned in PT-525 and in PT-526 lecture, and provide students an opportunity to share and assess the results of their community projects.

**PT-547 Pharmacology for Rehabilitation Spec (1 credits)**

This course explores trends in pharmacological management of acute and chronic conditions related to rehabilitative sciences including physical therapy, occupational therapy, speech therapy and related disciplines. Content addresses action, interactions, precautions and side effects of drug interventions in the rehabilitative management of patient/clients.

**PT-550 Clinical Neuroscience (3 credits)**

An in depth study of the neuroscience of the central and peripheral nervous systems. Clinical conditions and case studies in neurology will be utilized. Laboratory includes examination of neural specimens. Four lecture hours and three laboratory hours.

**PT-550L Clinical Neuroscience Lab (1 credits)****PT-552 Cardiopulmonary Physical Therapy (3 credits)**

This course covers principles and techniques of acute care, cardiac and pulmonary intervention. Laboratory experience includes cardiopulmonary assessment, exercise testing and prescription.

**PT-552L Cardiopulmonary Lab (1 credits)**

This course includes principles and techniques of cardiac and pulmonary intervention. Laboratory experience includes cardiopulmonary assessment, exercise testing.

**PT-552S Cardiopulmonary Seminar (1 credits)**

Students will work in small groups on case studies across the continuum of care with feedback from instructors. Students will practice skills needed for inpatient care with regards to chart review, line and environment management, and critical thinking.

**PT-555 Simulation I (1 credits)**

This interactive course will apply skills and concepts in patient assessment and intervention that have been presented throughout the curriculum. Students will perform patient assessment and interventions within a healthcare simulation center. Scenarios will be interactive using manikins and/or simulated patients for learning and competency achievement. This course will focus upon skills in history taking, patient education, selective assessment techniques such as MMT, Range of Motion, and selective interventions such as transfers, gait training and therapeutic exercise.

**PT-556 Simulation II (1 credits)**

This interactive course will apply skills and concepts in patient assessment and intervention that have been presented throughout the curriculum. Students will perform patient assessment and interventions within a healthcare simulation center. Scenarios will be interactive using manikins and/or simulated patients for learning and competency achievement. This course will focus upon skills in history taking, patient education, selective assessment techniques such as MMT, Range of Motion, joint integrity, specialized orthopedic and cardiac tests. Students will be challenged to make clinical decisions based upon their examination to select and administer appropriate interventions that include manual therapy techniques (including mobilization/manipulation thrust and nonthrust techniques), therapeutic exercise, cardiac rehabilitation, neurological interventions and the use of biophysical agents.

**PT-574 Clinical Fieldwork I (4 credits)**

This is the first full-time clinical fieldwork. Its purpose is to provide the student with the opportunity to integrate and apply academic knowledge and clinical skills in a fieldwork experience. Students are provided a supervised clinical experience requiring case management through problem evaluation, goal setting, and therapeutic intervention. (8 weeks, full time fieldwork)

**PT-575 Clinical Fieldwork I-A Physical Therapy Practice Under Covid 19 Pandemic Conditions (1 credits)**

This course provides synchronous and asynchronous instruction to students virtually using webinars, podcasts, case-based problem solving and discussion. PT 575 includes information on COVID including CDC guidelines and NYS regulations, mental health related challenges related to COVID and clinical decision making.

**PT-576 Clinical Fieldwork I-B Advanced Clinical Reasoning in Clinical Education (2 credits)**

This is an on-line clinical education required course preparing students in advanced clinical reasoning skills. Its purpose is to provide the student with the opportunity to identify safety issues in acute and critical care environments; communicate safe and efficient management of acute scenarios; discuss health disparities; analyze and synthesize critical elements of the patient interview and documentation record; develop higher level patient care management and decision making skills; obtain current healthcare knowledge in telehealth; understand essential elements in the development of a clinical instructor; and develop clinical instruction and problem solving skills. Students will be provided education on patient care management, basic equipment, lines, and tubes used in the intensive care unit (ICU), instruction on patient chart review analysis and development of documentation skills. Learners will also be provided assessment and problem-solving opportunities involving various patient care scenarios.

Prerequisite(s): Take PT-575

**PT-590 Independent Study (1-3 credits)**

A graduate student in good standing pursuing an independent study is able to delve into an area of special interest which is beyond the scope of current course offerings.

**PT-600 Clinical Decision-Making in Therapeutic Exercise (2 credits)**

This course will develop the theoretical basis and clinical application of therapeutic exercise commonly used by physical therapists. Specific course content will include indications, precautions and contraindications and principles and procedures for applying various types of therapeutic exercise interventions. Clinical reasoning, evidence based practice, and independent learning will be fostered through traditional lectures, group discussions and group presentations. Students will be required to apply and integrate knowledge learned from any preceding physical therapy coursework and clinical fieldwork experiences. Critical analysis of clinical scenarios will be incorporated into course.

Prerequisite(s): Take PT-506 PT-506L PT-518 PT-518L PT-522 PT-522L PT-500 PT-500L PT-552 PT-552L PT-602 PT-602L PT-606 PT-606L PT-513 PT-513L

Corequisite(s): Take PT-613 PT-613L PT-618 PT-618L

**PT-600L Clinical Decision-Making in Therapeutic Exercise Lab (1 credits)**

The course is the lab component of PT 701 which will offer clinical application of therapeutic exercise commonly used by physical therapists. Specific course content will include indications precautions and contraindications and principles and procedures for applying various types of therapeutic exercise interventions. Clinical reasoning, evidence based practice, and independent learning will be fostered through lab, seminar and group discussions. Students will be required to apply and integrate knowledge learned from any preceding physical therapy coursework and clinical fieldwork experiences. Critical analysis of clinical scenarios will be incorporated into course.

Prerequisite(s): Take PT-506 PT-506L PT-518 PT-518L PT-522 PT-522L PT-500 PT-500L PT-552 PT-552L PT-602 PT-602L PT-606 PT-606L PT-513 PT-513L

Corequisite(s): Take PT-613 PT-613L PT-618 PT-618L

**PT-602 Neurodevelopmental Pediatrics (2 credits)**

This course provides the foundation for physical therapy examination and treatment of individuals with emphasis on neurodevelopment and developmental disabilities in the pediatric population. This course explores the examination, evaluation and intervention strategies for the patient with movement dysfunction as a result of neurodevelopmental pathology. Concepts include: family dynamics, multi-setting interventions, advocacy and consultation. Identification of environmental risks will be explored.

**PT-602L Neurodevelopmental Pediatrics Lab (1 credits)**

This laboratory section provides the foundation for performance of the physical therapy examination and treatment of individuals with emphasis on neurodevelopmental and other chronic disabling conditions in a pediatric population. This lab will encompass examination, evaluation, and intervention for the patient with neurodevelopmental system pathology. Laboratory experiences include skill development in specialized techniques, patient case management and problem solving techniques.

**PT-604 Clinical Orientation Seminar III (0 credits)**

This seminar covers the administration of the clinical portion of the PT curriculum. The class will have the opportunity to ask questions and discuss the clinical experience and the Clinical Performance Instrument (CPI) as well as the new CPI web-based tool that is used as the evaluation tool by their clinical instructors. The development of the clinical instructor is introduced. Selection of the third clinical fieldwork placement (PT-675) will occur. Clinical professional preparation for the fieldwork experiences (PT-674 and PT-675) will also be included in this administrative course.

**PT-606 Neuromuscular Assessment (2 credits)**

This course provides the foundation for physical therapy examination and treatment of individuals with emphasis on neuromuscular and other chronic disabling conditions in an adult population. This course explores the examination, evaluation, and intervention strategies for the patient with movement dysfunction as a result of neuromuscular system pathology. Concepts include the following: theory and evidence based intervention strategies, patient education, multi-disciplinary care, family dynamics, multi-setting interventions, and consultation.

**PT-606L Neuromuscular Assessment Lab (1 credits)**

This laboratory section provides the foundation for performance of the physical therapy examination and treatment of individuals with emphasis on neuromuscular and other chronic disabling conditions in an adult population. This lab will encompass examination, evaluation, and intervention for the patient with neuromuscular system pathology. Laboratory experience includes cranial nerve testing, neuromuscular therapeutic handling techniques, and therapeutic exercise prescription for a neurologic patient population.

**PT-613 Orthopedic Physical Therapy II (3 credits)**

The course is designed to develop student skills in the areas of musculoskeletal examination, evaluation and intervention for patients with dysfunction of the extremities and their related structures. Competencies to be acquired include the ability to effectively plan all components of the physical examination, evaluate examination findings, develop a functional and medical diagnosis when appropriate, and identify appropriate interventions necessary to address patient impairments, functional limitations and disabilities. Intervention strategies presented will include manual therapy, exercise prescription, and modalities/ physical agents. An understanding of the functional anatomy of peripheral structures will be emphasized as they relate to patient management in orthopedics

**PT-613L Orthopedic II Lab (2 credits)**

This course is designed to develop student skills in the areas of clinical examination/ evaluation and intervention for the comprehensive management of individuals with musculoskeletal dysfunction related to pain syndromes, post-operative diagnoses, and degenerative processes. Lab experiences include instruction in problem solving strategies and hands-on assessment and treatment techniques as well as the development and implementation of specific exercise programs.

**PT-613S Orthopedic II Seminar (1 credits)**

This seminar is designed to provide students with the opportunity to apply skills related to the examination, evaluation, and management of disorders associated with neuromusculoskeletal dysfunction of the extremities. Simulated patient demonstrations, video, and written clinical cases will be analyzed and evaluated by participating students in small group discussions and online chat sessions. Through the synthesis of knowledge and skills presented in PT-613 Orthopedic Lecture and Laboratory, students will formulate a physical therapy diagnosis and create evidence based treatment plans for effective patient management.

**PT-615 Professional Development II (1 credits)**

This course builds on knowledge and development of effective clinical communication skills that were established in PT-515. Along with advancement of clinical verbal and non-verbal skills development, this course facilitates increased awareness and sensitivity of multicultural issues as well as discussion of how current professional issues influence PT practice, delivery and management of health care.

**PT-618 Rehabilitation II (3 credits)**

This course discusses the physical therapy patient/client management of adult individuals with neuromuscular disorders throughout the continuum of care. Related pathologies include peripheral vascular disease, amputations, rheumatoid arthritis, post-polio syndrome, vestibular dysfunction, spinal cord injury, and chronic progressive disorders of the nervous system and integumentary system. PT intervention/prescription of prosthetic/orthotic devices for adults will also be examined. Emphasis will be placed on the PT roles of educator, advocate and consultant in various rehabilitation settings including subacute/long-term care and the home. Case management topics include rehabilitation of clients with multiple medical, cognitive and/or social problems, and long-term management of selected neuromuscular and integumentary disorders.

**PT-618L Rehabilitation Lab II (2 credits)**

This course allows application of the physical therapy patient/client management of adult individuals with neuromuscular disorders throughout the continuum of care. Related pathologies include, peripheral vascular disease, amputations, rheumatoid arthritis, post-polio syndrome, and spinal cord injury and chronic progressive disorders of the nervous system and integumentary system. Emphasis is placed on developing and implementing examinations and treatment interventions appropriate to PT management.

**PT-627 Application of Research Methods in PT (3 credits)**

This course prepares students to critically analyze and apply theory and scientific evidence to clinical practice. Students synthesize related theory and published research to present a rationale for evidence-based physical therapist practice. Course activities include lectures and seminars (both small group and computer-based) in which students pose clinically relevant research questions, conduct a systematic literature review and perform critical analysis of research studies. Introduction to ethical issues and protection of human subjects as part of research will be discussed. Students will prepare a mock IRB submission for a hypothetical study based on a clinically relevant research question. Students are also introduced to professional literature addressing economics analysis of outcomes. Format: lecture and seminar. Program required courses.

**PT-627L App of Research Methods in PT Lab (1 credits)****PT-628 Research Seminar (3 credits)**

This seminar is conducted through small group discussions concerning critically appraised topics (CAT) required of students to complete a doctor of physical therapy degree. Students will search for and appraise literature pertinent to their CAT project, explore the economic evaluation literature, as it informs reimbursement policy and clinical practice guidelines, learn the basics of grant writing as well as publically disseminate their findings.

**PT-634 Spinal Manipulation (1 credits)**

This course presents evaluation and treatment strategies specific to spinal manipulation. Format includes lecture, demonstration, supervised lab practice and problem solving.

**PT-655 Simulation III (2 credits)**

This interactive course will apply skills and concepts in patient assessment and intervention that have been presented throughout the curriculum. Students will perform patient assessment and interventions within a healthcare simulation center. Scenarios will be interactive using manikins and/or simulated patients for learning and competency achievement. Students will be trained in TeamSTEPPS® prior to live scenarios. This course will prepare students for entry into the clinical phase of the curriculum. Competency on a standardized patient encounter, self and faculty assessed will be used to determine advancement into clinical experiences. This course will focus the student's ability to function professionally on a team for patient care management. This course will build upon skills in history taking, patient education, selective assessment techniques such as MMT, Range of Motion, joint integrity, specialized orthopedic and cardiac tests. Students will be challenged to make clinical decisions based upon their examination to select and administer appropriate interventions that include but not limited to; manual therapy techniques (including mobilization/manipulation thrust and nonthrust techniques), therapeutic exercise, cardiac rehabilitation, neurological interventions and the use of biophysical agents. Clinical case scenarios will be have embedded challenges for vulnerable populations surrounding psychosocial issues, that may require emergent responses or consultation with the patient care team.

**PT-660 Clinical Residency (3 credits)**

This course is a structured clinical experience, which allows the certificate student clinicians the opportunity to apply and master skills acquired during their course of study in a supervised clinical environment.

**PT-674 Fieldwork II (4 credits)**

This is the second full-time clinical fieldwork. Its purpose is to provide the student with the opportunity to integrate and apply academic knowledge and clinical skills in a fieldwork experience. Students are provided a supervised clinical experience requiring case management through problem evaluation, goal setting, and therapeutic intervention. The preferred setting is a facility that provides a continuum of patient care in differing venues.

**PT-675 Clinical Fieldwork II (6 credits)**

This is the second full-time clinical fieldwork. Its purpose is to provide the student with the opportunity to integrate and apply academic knowledge and clinical skills in a fieldwork experience. Students are provided a supervised clinical experience requiring case management through problem evaluation, goal setting, and therapeutic intervention. (12 weeks, full time fieldwork)

**PT-680 Hippotherapy (1 credits)**

This transdisciplinary, graduate level, elective course will introduce the student to the basic history, conceptual framework and clinical application of Hippotherapy. Hippotherapy is a physical, occupational or speech therapy treatment strategy that utilizes equine movement. The movement of the horse is used as a tool to provide challenges in postural control, strength, flexibility, balance, and sensory processing for individuals who have neuromusculoskeletal dysfunction. Due to the immature and developing systems of the pediatric population, hippotherapy has been shown to be effective for children with disabilities. Hippotherapy is also an effective strategy to enhance cognitive skills, psychosocial skills, and behavioral/attentional skills in children.

**PT-681 Advanced Wheelchair Seating & Positioning (1 credits)**

Students will develop an advanced level of understanding regarding the process of custom seating and positioning of persons with disabilities and be able to prescribe and justify customized wheelchairs and seating systems to third-party payers.

**PT-683 Translating Personal (1 credits)**

Students will use a proven tool to assess their personality strengths. Then discussions and individual work will be done to ascertain how the student may use those strengths in their health care field.

**PT-684 Manual Therapy in Sports Rehabilitation (1 credits)**

This course will provide physical therapists with advanced techniques and problem solving skills for the examination and management of athletes with neuromusculoskeletal dysfunction. Course participants will be exposed to a wide-range of evidence-based approaches to the application of orthopedic manual physical therapy. Techniques will include but are not limited to: thrust and non-thrust manipulation, soft tissue manipulation as well as kinematic taping and exercise progressions. The course instructor will direct topic-focused discussion and problem solving sessions, evaluate and provide feedback of psychomotor skills demonstrated.

**PT-685 Topics in Pediatrics (1 credits)**

This course provides information on specialty areas above and beyond the entry level content in pediatric curriculum requirements with emphasis on assessment and intervention within the pediatric population with developmental disabilities. This course explores the examination, evaluation and intervention strategies for the complicated pediatric patient with movement dysfunction as a result of neurodevelopmental pathology. Utilizing lecture and lab experiences, this course offers additional opportunities in advanced evaluation and treatment. Topics will involve a variety of applications for assessment and intervention strategies.

**PT-686 Aquatic P.T. (1 credits)**

Students will develop progressive skills in the practice of aquatic physical therapy. This course will emphasize development of a plan of care and interventions related to aquatic exercise. Students will practice hands-on skills, as well as develop an understanding of aquatics.

**PT-687 Comprehensive Soft Tissue Manipulation (1 credits)**

This course is an introduction to soft tissue manipulation. It is designed to teach the participant an eclectic approach to evaluate and treat the soft tissues of the body. The students will learn a movement based assessment, which incorporates elements of MDT and the SFMA. The participant will review the anatomy and physiology of myofascia. Indications and contraindications to treatment will be discussed. The treatments will be divided into three types: 1) basic soft tissue manipulation, 2) functional release, and 3) instrument/tool assisted soft tissue manipulation using the EDGE Tool. Patterns of tissue dysfunction will be taught for assessment and treatment. Format includes lecture, demonstration, supervised lab practice and problem solving.

**PT-688 Functional Approach to Exercise (1 credits)**

The main objective in this class will be to take a look at functional biomechanics and muscle function, and place them into practical rehabilitation settings. Also, the components of function will be broken down into measurable tests, thereby leading us into a spectrum of functional exercises and treatment strategies.

**PT-689 Special Topics Elective (1-3 credits)****PT-689L Special Topics Elective Lab (1 credits)****PT-690 Student Run Free Clinic Elective (1 credits)**

This is a course that is presently a special topics course progressing to a traditional course. The contemporary physical therapist interacts with patients through assessment and utilizes exercise as a therapeutic agent in the clinical management of a variety of pathological conditions. The student requires a firm and comprehensive foundation in basic essential skills of physical therapy including utilization of history taking and patient interaction, various transfer techniques, manual muscle testing and range of motion assessment. The major objective of this course is to introduce the student to the process and function of a physical therapy clinic prior to their going out on clinical rotations. Furthermore, the student will be able to observe and subsequently interact with patients during their PT assessment and treatment under the supervision of a licensed physical therapist and be exposed to the process of interprofessional interaction. 3 hours lecture per week

Prerequisite(s): PT-500

**PT-703 Education Advocacy Consultation (2 credits)**

This seminar course is designed to advance client educator skills and explore advocacy and consultative roles within the context of rehabilitative science. Once students have knowledge of the applied theory and concepts related to these roles, they present and peer-review applications of this knowledge. Format: hybrid – on campus seminars and community based activities.

**PT-709 Business Management Strategies for Physical Therapists (1 credits)**

This course will introduce relevant health care business management concepts and tools along with the most current legislative issues affecting physical therapy practice in the United States. Students will develop a basic foundation for business management strategies and professional issues needed in order to lead clinical operations of physical therapy in a variety of healthcare settings including the demand for both clinical and business excellence in the future of the physical therapy profession.

**PT-725 Clinical Fieldwork III (6 credits)**

This is the final full-time clinical fieldwork. Its purpose is to provide the student with the opportunity to integrate and apply academic knowledge and clinical skills in a fieldwork experience. Students are provided a supervised clinical experience requiring case management through problem evaluation, goal setting, and therapeutic intervention. (12 weeks, full time fieldwork)

**PT-731 Advanced Orthopedic Spine (3 credits)**

This course presents evaluation and treatment strategies for management of musculoskeletal problems focusing on the spine. Format includes lecture, demonstration, supervised lab practice and problem solving.

**PT-732 Advanced Orthopedics Extremities (3 credits)**

This course presents evaluation and treatment strategies for management of musculoskeletal problems focusing on the extremities. Format includes lecture, demonstration, supervised lab practice and problem solving.

**PT-748 Differential Diagnosis (3 credits)**

The content of this course is designed to prepare both physical therapy students and practicing physical therapists to function as primary care providers within the field of physical therapy. Participants in this course will learn to identify key indicators of systemic pathology in order to assist in the development of a differential diagnosis and thus identify the necessity of direct physical therapy intervention or the need for referral to other health care providers. Participants will also be introduced to the basic skills necessary to identify the indications for radiographic and hematological testing as well as the clinical interpretation of data obtained from these tests.

**PT-750 Taping Methods (1 credits)****PT-752 Intro to Pelvic Floor Dysfunction (1 credits)**

Students will develop a basic understanding of the role of Physical Therapy in the assessment and treatment of pelvic floor dysfunction. This course will cover non-internal evaluation and treatment techniques for an array of diagnosis. Orthopedic training principles will be used to design basic programs. Specialized tests will be introduced in order to accurately evaluate the deep core musculature as it pertains to functional movement. This course will be lecture and lab format.

**PT-789 NPTE Examination Preparation I (1 credits)**

This online interactive course is a thorough preparation for the NPTE. The course includes live, interactive webinars, weekly Q&A sessions, an independent study timeline, access to digital study groups, complete practice exam simulations, and study oriented course assignments. All online class lectures are recorded and available for the duration of the course.

**PT-799 NPTE Examination Preparation II (1 credits)**

This administrative course assists student in self-assessment of learning with preparation and practice to take the National Physical Therapy Examination upon graduation from the program. The NPTE is a 200 question, 4 hour computer-based examination which summatively evaluates a graduate's safety and competency to be licensed in the profession. This course provides the framework for one practice attempt simulating the 200-question, computer-based exam needed for licensure serving as a formative self-assessment from which each student will develop an individualized study/review plan facilitated by selected review sessions monitored by program faculty based on the analyses of the pre-test.