STUDENT ACADEMIC PREPARATION

Clinical Education Experiences I, II, III

*Please note that students must demonstrate minimum competency in performance of all clinical skills associated with laboratory coursework. Competency is evaluated via practical exams.

Clinical Education I (2 days/week; 12 days):

The student enrolled in Clinical Education I has completed two semesters of academic study and will simultaneously be taking Principles of Practice III. The following are descriptions of the coursework they will have completed prior to Clinical Education I:

First Year, Fall Semester

PHT1020 Principles of Practice (POP) I
This course is the first in a series of courses devoted to three broad themes: communication, professional development, and clinical skill development. The POP course material is presented in a sequence designed to complement both the didactic material and clinical experiences of the students during the semesters in which the courses are taught. In POP I, communication skills focus on how to conduct a basic patient interview, medical records management, risk management and the role of the PTA in medical error/incident/emergency management. The student is also provided an introduction to the profession of physical therapy emphasizing historical background and the WHO ICF Model, PT/PTA roles & responsibilities, principles of collaboration, APTA professional organizational structure, policies and procedures, and caregiver definitions and roles. Clinical skill development incorporates infection control, transfer training, body mechanics, bariatric specific techniques, positioning and draping, integumentary and hemodynamic effects of body positioning, the use of ambulatory aids, gait training, and wheelchair and seating prescription.

PHT1020L Principles of Practice I Lab
This course consists of the laboratory sessions for PHT 1020. The lab provides for practice and attainment of beginning competency in skill activities emphasizing vital signs, infection control, body mechanics, positioning and draping, transfers, use of ambulatory aids, gait training, therapeutic seating principles and basic patient care.

PHT1121 Functional Anatomy and Kinesiology
This course includes the study of the structure and function of the musculoskeletal system with emphasis on the mechanical (functional) aspects of human motion. Actions, origins, and insertions of muscles are presented. Muscle testing, goniometry, and the aspects of normal functional gait and posture related to therapeutic exercise are discussed.

PHT1121L Functional Anatomy and Kinesiology Lab
This course consists of the laboratory sessions for PHT 1120. The course includes the development of student skills in palpation of bony landmarks, goniometry, manual muscle testing, dynamometry, basic gait analysis and muscle function as it relates to biomechanical principles of human motion and therapeutic exercise.

PHT1213 Foundations of Therapeutic Exercise
This course introduces the physiological and mechanical concepts of tissue healing and provides a framework for the application of exercises used to treat a variety of tissue injuries in physical therapy. The theoretical background, training principles and application methods for various exercises and conditioning regimens are presented including: stretching, joint mobilization, resistance exercises, endurance training,
balance training, and aquatic therapy. These principles and techniques will be applied to the management of common orthopedic disorders of the spine, upper extremity, and lower extremity as well as selected medical and surgical conditions.

**PHT1213L Foundations of Therapeutic Exercise Lab**
This course consists of the laboratory sessions for PHT 1213 providing for the therapeutic application of various exercises. Emphasis will be placed on linking the appropriate exercise to the type of injured tissue(s) and the progression of training to the stage of tissue healing. Exercise programs for specific orthopedic/medical conditions will be practiced.

**Required Texts for Fall Semester:**


**First Year, Spring Semester**

**PHT1080 Principles of Practice II**
In POP II, communication skill development focuses on the various aspects of patient-provider interaction including respectful communication, effective helping, setting professional boundaries, and communicating across the lifespan as well as with the disabled and dying. Adult learning principles are emphasized and the concept of health literacy is explored. Students are taught to verify and document patient understanding/comprehension of education/instruction. Professional development issues/topics focus on practice standards and the Guide to PT Practice and Documentation as well as the Direction and Supervision of the PTA and the Guide for PTA Conduct. Course content addresses moral and legal aspects of confidentiality and informed consent, codes of ethics, end of life decisions, living wills, and “do not resuscitate” orders. Students expand their clinical skills by learning how to assess the environment to ensure patient safety, function and comfort in the home, community and work environment. Pain theory and related pharmacology as well as the general principles of pharmacology are presented in preparation for more complex pathologies and to reinforce the material presented in PHT1132.

**PHT1080L Principles of Practice II Lab**
This course consists of the laboratory sessions for PHT1080 and provides for the practice of communication skills such as conflict resolution, cultural awareness/sensitivity, and assertive behaviors. Simulated patient and provider situations are used to develop and evaluate communication skills. Group activities are used to reinforce the professional development content. Clinical topics and assessments of home, community and work environments are also completed as small group activities.

**PHT1132 Musculoskeletal Physical Therapy**
This course presents an overview of diseases, acute and chronic conditions, and surgical repairs affecting the musculoskeletal system across the lifespan. The etiology, signs and symptoms, medical diagnostic procedures, medical treatment, prognosis, and prevention of impairments most commonly treated in physical therapy are discussed. This course also incorporates the basic pharmacological management of specific musculoskeletal disorders. Specific drugs and therapeutic effects associated with patients receiving physical therapy for musculoskeletal treatment are discussed. Emphasis is on physical therapy examination and data collection, special tests, differential diagnosis and physical therapy interventions to rehabilitate and prevent secondary complications.
PHT1132L Musculoskeletal Physical Therapy Lab
This course consists of the laboratory sessions for PHT1132 and provides for the therapeutic application of various exercises, manual therapy techniques, soft tissue mobilization, joint manipulation techniques and modalities. Interventions for specific skeletal, soft tissue and orthopedic surgical repairs will be practiced.

Required Texts for Spring Semester:


First Year, Summer I

PHT2081 Principles of Practice III
This course introduces the theory and practical application of various physical agents used by the Physical Therapist Assistant. For each category of physical agent, the mechanisms of action, physiological effects, indications/contraindications and the correct application is presented. Three categories of agents are presented; thermodynamic, mechanical and electromagnetic. Peripheral integumentary assessment is introduced including vascular assessment to enable the student to identify contraindications to and precautions for specific modalities. Basic risk assessment for integumentary injury, wound assessment and basic wound management are included. An evidence-based approach is used to provide a rationale for the recommended use of various modalities. Concepts in evidence-based practice are introduced including research design, levels of evidence, recommendation grading, data analyses and interpretation. The relationship between research evidence and third party reimbursement policy is explored. Students develop skills in accessing and interpreting evidence to support clinical decision-making.

PHT2081L Principles of Practice III Lab
This course consists of the laboratory sessions for PHT2081. Students practice skill performance of all modalities/procedures presented and must demonstrate competence in the application of thermodynamic agents (superficial cold and heat, deep heating), mechanical modalities (massage, compression, hydrotherapy, ultrasound, traction, tilt table) and electromagnetic agents (TENS, NMES, IFC, FES, diathermy, laser and UV light). Wound management emphasizes prevention of pressure ulcers, wound assessment and documentation, identification and classification of chronic wounds, wound cleansing and dressing changes, pain management, and various compression methods for venous insufficiency and lymphedema.

PHT1801 Clinical Education I (Outpatient PT Facilities)
This course constitutes the first clinical education experience for the student physical therapist assistant. Each student is assigned to a clinical facility and performs various physical therapy modalities and basic exercises under the direct supervision of a physical therapist and/or physical therapist assistant under the general supervision of a physical therapist. Expected performance is at the beginner to advanced beginner level of competence. Scheduled clinical conferences are included to review assignments with additional group discussion on professional issues. Students must maintain a clinical notebook containing required forms as well as records of daily, weekly and optional experiences. Students must also complete a research article review and present their review to the clinical facility staff.
Required Texts for: Summer I Session:

- O'Sullivan & Schmitz, Physical Rehabilitation, FA Davis, 6th edition

Clinical Education II (3 days/week; 36 days):

The student enrolled in Clinical Education II has completed all of the coursework described above and Clinical Education I. The following is a description of the additional course work they will be taking simultaneously with Clinical Education II:

Second Year, Fall Semester

**PHT2255 Neuromuscular Physical Therapy**

This course presents an overview of the nervous system including its organization, basic anatomy and physiology of the brain and spinal cord, structural components, developmental sequence and the principles of motor control. Selected diseases and acute and chronic conditions affecting the neuromuscular system across the lifespan will be presented. The etiology, signs and symptoms, medical diagnostic procedures, medical treatment, prognosis, and prevention of neuromuscular impairments most commonly treated in physical therapy are discussed. This course also incorporates the basic pharmacological management of specific neuromuscular disorders. Specific drugs and therapeutic effects associated with patients receiving physical therapy for neuromuscular treatment are discussed. Emphasis is on physical therapy examination and data collection, differential diagnosis, and physical therapy interventions to rehabilitate and prevent secondary complications.

**PHT2255 Neuromuscular Physical Therapy Lab**

This course consists of the laboratory sessions for PHT2255. The laboratory experiences provide an opportunity for the student to practice the application of specific interventions including the use of developmental postures, facilitation/inhibition techniques, spasticity management, vestibular training, the use of alternative/augmentative communication and other adaptive devices. Emphasis is on treatment techniques for genetic/congenital conditions, infectious diseases, degenerative diseases, seizures, CNS neoplasms, peripheral nervous system disorders, CVA, traumatic brain injury, spinal cord injury, vestibular system disorders and painful neurological conditions.

**PHT2810 Clinical Education II (Acute, Sub-Acute, Rehab, SNF, AF Facilities)**

This course constitutes the second clinical education experience for the student physical therapist assistant. Each student is assigned to a clinical facility and performs various physical therapy interventions under the direct supervision of a physical therapist and/or physical therapist assistant who is under the general supervision of a physical therapist. Expected performance is at the advanced beginner to intermediate level of competence. Scheduled clinical conferences are included to review assignments with additional group discussion on professional issues. Students must maintain a clinical notebook containing required forms as well as records of daily, weekly and optional experiences. Students must also complete a case study and present their study to the clinical facility staff.
Required Texts for Fall Semester, Second Year:


Clinical Education III (5 days/week; 36 days):

The student enrolled in Clinical Education III has completed all of the courses described above and Clinical Education I and II. The following is a description of the additional course work they will be taking simultaneously with Clinical Education III:

Second Year, Spring Semester

PHT2288 Cardiovascular, Pulmonary, Lymphatic and Systemic Physical Therapy
This course presents an overview of the cardiac, vascular, pulmonary and lymphatic systems as well as other systemic dysfunction; i.e., immune, hematological, cancer, GI and metabolic, renal and urogenital, and genital/reproductive. The course presents the basic organization, anatomy and physiology, and neurohumoral influences of these various systems. Selected diseases, acute and chronic conditions, and surgical repair (CABG, amputation, organ transplantation, etc.) affecting these systems across the lifespan will be presented. The etiology, signs and symptoms, medical diagnostic procedures, laboratory tests and values, medical treatment, prognosis, and prevention of impairments most commonly treated in physical therapy are discussed. This course also incorporates the basic pharmacological management of specific cardiovascular, pulmonary and metabolic disorders. Specific drugs and therapeutic effects associated with patients receiving physical therapy for cardiovascular, pulmonary, and metabolic treatment are discussed. Emphasis is on physical therapy examination and data collection, differential diagnosis, and physical therapy interventions to rehabilitate and prevent secondary complications.

PHT2288L Cardiovascular, Pulmonary, Lymphatic and Systemic Physical Therapy Lab
This course consists of the laboratory sessions for PHT2288. The laboratory experiences provide an opportunity for the student to practice the application of screening and monitoring methods for specific diseases as well as interventions. Emphasis is on the role of physical therapy in the management of these diseases and various physical therapy interventions for cardiac conditions (coronary artery disease, hypertension, congestive heart failure), pulmonary conditions (asthma, COPD, cystic fibrosis) peripheral vascular disease (arterial, venous and lymphatic disease/dysfunction), amputation, diabetes and other systemic conditions commonly treated or observed as comorbid conditions by physical therapists.

PHT2820 Clinical Education III (Acute, Sub-Acute, Rehab, SNF, AF Facilities or Specialty Practices)
This course constitutes the final clinical education experience for the student physical therapist assistant. Each student is assigned to a clinical facility and performs various physical therapy interventions under the direct supervision of a physical therapist and/or physical therapist assistant who is under the general supervision of a physical therapist. Expected performance is at the advanced intermediate or entry level of competence. Scheduled clinical conferences are included to review assignments with additional group discussion on clinical experiences. Students must maintain a clinical notebook containing required forms as well as records of daily, weekly and optional
experiences. Students must also complete a case study and present their study to the clinical facility staff.

Required Texts for Spring Semester, Second Year:


*PTA students have multiple copies of many classic physical therapy texts on active reserve in the IRSC library. Students are required to make use of these texts through assigned readings for specific courses.*

The following general education courses may also be taken prior to acceptance in the Physical Therapist Assistant program:

**HSC2531 Medical Terminology I**
This course is the foundation for understanding of the language of medicine. By beginning with roots, suffixes, and prefixes, the student learns to interpret and recognize medical terminology by system.

**BSC2093 Anatomy and Physiology I**
The first semester of a two-semester sequence, this course studies regional and systemic anatomy and physiology of the human body. Emphasis will be placed on histology and the integumentary, skeletal, muscular, and nervous systems. During the first two weeks of class, students will be tested in prerequisite materials such as simple chemistry, cell structure, biochemistry, metabolism, and molecular genetics.

**BSC2093L Anatomy and Physiology I Lab**
This is the lab component for Anatomy and Physiology I. Lab experiences will include the following topic areas of histology and the integumentary, skeletal, muscular, and nervous systems.

**BSC2094 Anatomy and Physiology II**
This is a continuation of BSC 2093, studying the anatomy and physiology of human systems. Topics to be covered are the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

**BSC2094L Anatomy and Physiology II Lab**
This is the lab component for Anatomy and Physiology II. Lab experiences will include the following topics areas of circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems.

**PHY1025 Principles of Physics**
This course is both a classic and technical physics course. It emphasizes both physical principles and physics applications in today's world. The student will learn the scientific method of problem solving, as well as develop critical thinking and reasoning skills. Topics include, but are not limited to measurement, problem solving, motion, force, work, energy, simple machines, rotational motion, matter, fluids, temperature and heat, gas laws, wave dynamics, electricity, magnetism, and optics.
MAT1033 Intermediate Algebra
This course covers the following topics: factoring, algebraic fractions, radical and rational equations, complex numbers, quadratic equations, rational equations, linear equations, and inequalities in two variables and their graphs, systems of linear equations and inequalities, and introduction to functions.

ENC1101 English Composition I
This course presents the rhetorical principles of modern and classical essays, which in practical application enable students to compose college level expository and argumentative essays. This course contains a required speech component. Student must produce 6,000 words of acceptable written work.

PSY2012 Introduction to Psychology
This course provides an introduction to the scientific study of human behavior and mental processes by surveying the different subfields of psychology. Topics include the brain, memory, personality, abnormal behavior, and cognition.

Suggested Humanities Courses:

PHI1635 Ethical Issues in Health Care

PHI2630 Introduction to Ethics

PHI1103 Critical and Creative Thinking