

# PHYSICAL THERAPIST ASSISTANT (PTA)

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## **PTA 1400 Physical Therapy Foundations – 3 credits**

This course introduces students to the foundational concepts of physical therapy as a profession within the health care system and the roles of the physical therapist (PT) and physical therapist assistant (PTA) within that system. Students will learn about the history of physical therapy, the responsibilities of the PT and PTA as members of a professional team, the use of communication, documentation, and evidence-based practice in physical therapy, the various entities and regulations that have influence over PT, and the psychosocial/affective elements that are essential to the delivery of high-quality patient care. Students will then be introduced to principles of normal movement and patient/caregiver safety, and will apply that knowledge in the performance of basic patient handling techniques.

**Corequisite:** BIOL 2400.

## **PTA 1500 Musculoskeletal System and Techniques I – 4 credits**

This course offers the learner opportunities to learn the depth of musculoskeletal anatomy and apply this to interventions and measurements for physical therapy. Students will learn the fundamental skills of measurement including goniometry and manual muscle testing. Students will demonstrate competency in technical skills for common techniques in physical therapy such as anatomical palpation skill. Basic tissue pathology in orthopedic and musculoskeletal physical therapy will be introduced. At the end of the course, a three (3) day clinical experience allows students to apply course content and practice physical therapy skills learned thus far. By course end, students will have the foundational understanding of the application of musculoskeletal anatomy to apply in the field of physical therapy.

**Prerequisite:** PTA 1400.

## **PTA 1550 Neuromuscular System and Techniques I – 3 credits**

This course provides the student with foundational knowledge of the Neuromuscular system needed for safe and effective PTA practice. Core topics include: clinical neuroanatomy, nerve injury and healing, neuroplasticity, normal and abnormal muscle tone, normal motor development, and primitive reflexes. Motor control theories and principles used in physical therapy practice will be introduced and applied. Functional task analysis will be applied to human movement across the lifespan. The student will learn these foundational concepts and begin to apply them to patients with impaired functional movement. Offered within the College for Adults.

## **PTA 1600 Physical Therapy Interventions – 4 credits**

The learner will apply concepts of kinesiology, biomechanics and physics to the delivery of therapeutic exercise, manual therapy and various physical agents used to promote pain relief and tissue healing. Students are exposed to the theoretical principles and evidence for these physical therapy interventions and are expected to demonstrate understanding of these principles while communicating appropriate information about them to the patient/client (e.g. rationale/purpose related to diagnosis, physiological effects, and contraindications). Students will demonstrate competency in the application of various interventions, including exercises and physical agents. Competency includes proper positioning, selecting appropriate parameters and dosing based on desired outcomes and the plan of care, proper use/adjustment of equipment, and modifying a given intervention, based on patient response.

**Prerequisite:** PTA 1500.

## **PTA 1700 Professional, Practice, and Societal Health Considerations – 4 credits**

A second, three-day introductory clinical experience will start this course and allow students to apply concepts and skills learned in previous courses via supervised interaction with patients, physical therapy clinicians, and other health care providers. This course will then expand the students' understanding of how individual health behaviors are affected by and have an effect on one's social environment by analyzing the American health care system. Students will examine the social, political, economic, and environmental forces that continue to shape health and health care today. Course components include the basic structure of the health care system, recent initiatives for health care reform, billing and payment for physical therapy services, assessment of quality in health care, the environmental causes of behavior, and environmental interventions. Students will be exposed to an intradisciplinary experience with the participating doctor of physical therapy students with a focus on experiential learning in community settings that include vulnerable or underserved populations and/or lack of access to comprehensive health care services. Students will participate in preparatory and reflection activities prior to, during and following the immersion experience. Offered in the College for Adults.

**Prerequisite:** PTA 1600.

## **PTA 2000 Physical Therapy Intervention Techniques III – 8 credits**

This course offers the learner opportunities to build a base of knowledge of principles related to: therapeutic exercise including the basic physiology of techniques and their application; equipment utilization, specific techniques and their application to patients with various disabilities; integration of manual muscle testing and goniometry relating to the PTA role in assisting with, recording and reading the results of these evaluation processes; study of the principles and techniques related to ambulation including measurement and fitting of ambulation aids; pre-ambulation exercise and mat programs; gait patterns and drills; study of normal posture and gait, commonly treated mobility disorders; implication of sensory and motor impairment on ambulation; study of the rationale for and specific techniques employed in the rehabilitation of persons with long term disabilities, i.e. hemiplegia, spinal cord injury, amputation, multiple sclerosis, traumatic injury and respiratory disease; study of the roles and goals of the "rehabilitation team" as individual specialists and team members; and introduction to orthotics and prosthetics. The application of principles and techniques occur in lecture and laboratory settings. Offered in the College for Adults.

**Prerequisites:** PTA 1310, PTA 2020.

## **PTA 2010 Introductory Concepts in Pediatric Physical Therapy – 1 credit**

Common pediatric disorders will be discussed and include the effects of the disorder and current rehabilitative management. The study of pediatric concepts will include optimal development as compared to non-optimal development. A knowledge base for intervention will be provided and will include handling techniques and physical management. Discussion of modulation of states, signs of self-regulation and distress will be included. The effect of disability on psychosocial status and communication skills used in interacting and teaching parents and children will be studied. Discussion of family, health and education issues, as well as payer sources, community resources and the need for referral will be incorporated. Direct observation of pediatric clinical settings will be incorporated. Discussion with a parent of a non-optimally developing child will also be included. Offered in the College for Adults.

**Prerequisites:** PTA 1310, PTA 2020, program director approval.

**PTA 2100 Clinical Experience II – 3 credits**

Clinical Experience II occurs during January and February of the second year in the PTA program and includes six weeks of full days (40 hours per week) in the clinical setting, using skills acquired throughout the program. Clinical experiences will be performed in a variety of settings under the direction of clinical instructors (CIs) representing a diverse range of knowledge and experience. The purpose of this course is to solidify the data collection techniques and technical intervention skills learned in the fall semester of the second year, in addition to building upon those skills learned in the first year and practiced in PTA 1310. This clinical provides the student with full-time hands-on practice in a physical therapy department, encouraging integration of previous classroom knowledge. It promotes the student's understanding of the health-care system, allows the student to participate as an active, cooperative member of the health care team, and encourages development of an ethical, holistic practitioner with regard for the whole person in all interactions. Because this is a full-time commitment, students are expected to actively participate in patient/client care conferences, PT staff meetings and in-service opportunities at their clinical sites. Students are expected to learn about and participate appropriately in the facilities' reimbursement and documentation systems. Offered in the College for Adults.

**Prerequisite:** PTA 2000.

**PTA 2210 Clinical Experience III – 3 credits**

Clinical Experience III occurs immediately after Clinical Experience II, from late February to early April of the second year. It consists of six weeks of full-time (40 hours per week) hands-on practice in a physical therapy department, encouraging further integration and refinement of knowledge, techniques and interpersonal skills acquired throughout their two-year PTA educational program. Clinical experiences will be performed in a variety of settings under the direction of clinical instructors (CIs) representing a diverse range of knowledge and experience. Students are expected to utilize clinical decision-making strategies, problem-solving skills and effective communication toward the goal of functioning as an entry-level member of the health care team. Students are expected to demonstrate clinical decision-making strategies and problem-solving skills of increasing frequency and complexity. Just as importantly, they must consistently demonstrate professionalism, confidence, initiative and effective interpersonal skills at levels that allow them to function as an effective member of the health-care team. This clinical promotes the student's understanding of the health-care system, allows the student to participate as an active, cooperative member of the health care team, and encourages development of an ethical, holistic practitioner with regard for the whole person in all interactions. Students are expected to actively participate in patient/client care conferences, PT staff meetings and in-service opportunities at their clinical sites. Students are expected to learn about and participate appropriately in the facilities' reimbursement and documentation systems. Objectives are designed to evaluate the student's ability to function competently, utilizing the competencies specified for an entry-level physical therapist assistant. Offered in the College for Adults.

**Prerequisite:** PTA 2000.

**PTA 2260 Learning and Service Through Immersion – 1 credit**

This is a three week course with a focus on experiential learning in community settings that include vulnerable or underserved populations and/or lack of access to comprehensive health care services. The length of the immersion experience into the community may vary depending on the location of the course. Students will be exposed to an interdisciplinary experience with the participating doctor of physical therapy students. Students will participate in preparatory and reflection activities prior to, during and following the immersion experience. Offered in the College for Adults.

**Prerequisite:** PTA 2210 or instructor approval.

**PTA 2410 Capstone Seminar and Project – 2 credits**

This course provides a capstone experience for students to reflect and explore the application of the common elements of the PTA program's curriculum: ethical decision-making, critical-thinking, understanding the patient/client as a whole, collaborative and applied learning, and leadership. Special emphasis is placed on ethical frameworks, spirituality and its role in healing, principles of Catholic social teaching and the Physical Therapy Core Values. Preparation for entering the physical therapy clinical community includes preparation for the licensure exam and emphasis on professionalism, leadership behaviors and life-long learning. The completion and presentation of a case study project and a final program comprehensive exam are included in this course.

**Prerequisite:** PTA 2000.

**PTA 2500 Musculoskeletal Systems and Interventions II – 3 credits**

This course offers the learner opportunities to advance their knowledge of the musculoskeletal system and to the application of foundational physical therapy interventions. Building upon the content introduced in PTA 1500, students will continue to develop their knowledge base related to the structure, function, and pathology of the spine, upper extremities, and lower extremities. They will then apply that knowledge to the delivery of essential interventions related to those joints, and will demonstrate competence in application of selected concepts and skills for orthopedic conditions. Prerequisite(s): PTA 1700.

**PTA 2550 Movement System Integration – 2 credits**

In this course students will study of the principles and techniques related to ambulation including measurement and fitting of ambulation aids; pre-ambulation exercise and mat programs; gait patterns and drills; study of normal posture and gait, and commonly treated mobility disorders. Students will also build on previous course content focused on the musculoskeletal and neuromuscular systems by integrating information on additional body systems involved with movement including the integumentary, immune, cardiovascular, and respiratory systems. Students will examine the movement system, or integration of all body systems, across the lifespan and will be encouraged to consider social, environmental, and personal factors that may impact the movement system. Prerequisite(s): PTA 2500.

**PTA 2600 Neuromuscular System and Techniques II – 4 credits**

This course provides the student with knowledge, integration and application of physical therapy practice with a focus on: neuromuscular system pathology, acute and ICU care, and other clinical considerations needed for safe and effective PTA practice for patients with neurologic and other medically complex conditions. The student will develop skill in reviewing PT evaluation/plan of care data to determine appropriate intervention delivery and progression within the plan of care for patients with CVA, TBI, Spinal Cord Injury, Multiple Sclerosis, Guillain Barre Syndrome, Parkinson's, ALS, respiratory dysfunction, and others. Core topics include: foundational neurological PT interventional paradigms (i.e., NDT, PNF, Rood), functional mobility, balance assessment and treatment, clinical gait assessment and progression, orthotics, bracing, body-weight support, NMES and other augmented clinical interventions for this population. All content is taught within the context of the ICF model, interprofessional clinical practice, and considering the patient's social determinants of health. Prerequisite(s): PTA 2500.

**PTA 2681 Directed Study – 1 credit**

Directed study is provided for students whose unusual circumstances prohibit taking a regularly scheduled course but who need the material of that course to satisfy a requirement. Availability of this faculty-directed learning experience depends on faculty time and may be limited in any given term and restricted to certain courses.

**Prerequisites:** Faculty, department chair and dean approval.

**PTA 2682 Directed Study – 2 credits****PTA 2683 Directed Study – 3 credits****PTA 2700 Clinical Integration I – 4 credits**

Clinical Integration I will occur during November and December of the second year in the PTA program and includes eight weeks of full days in the clinical setting, using skills acquired throughout the program. Clinical experiences will be performed in a variety of settings under the direction of clinical instructors (CIs) representing a diverse range of knowledge and experience. The purpose of this course is to solidify the data collection techniques and technical intervention skills learned in the summer and fall semesters of the second year, in addition to building upon those skills learned in the first year. This clinical provides the student with full-time hands-on practice in a physical therapy department, encouraging integration of previous classroom knowledge. It promotes the student's understanding of the health-care system, allows the student to participate as an active, cooperative member of the health care team, and encourages development of an ethical, holistic practitioner with regard for the whole person in all interactions. Given the student will have completed much of their didactic coursework prior to this course, in addition to two three-day integrated introductory clinical experiences, they are expected to actively participate in patient/client care conferences, PT staff meetings and in-service opportunities at their clinical sites. Students are expected to learn about and participate appropriately in the facilities' reimbursement and documentation systems. Students will also engage in collecting data for a case study to be presented in PTA 2800. Prerequisite(s): PTA 2600.

**PTA 2800 Inter-Clinical Seminar – 2 credits**

This course provides a capstone experience for students to demonstrate readiness to enter the physical therapy profession, via reflection, demonstration and application of the common elements of the PTA program's curriculum: ethical decision-making, critical-thinking, understanding the patient/client as a whole, collaborative and applied learning, and leadership. Students will demonstrate their ability to apply these elements to patient care via the development and delivery of a patient case study presentation, based on data collected in a previous clinical experience. The course will provide instruction in procedures required to enter the profession, including procedures for obtaining state licensure, registering for the national PTA licensure exam, and developing a resume' and interviewing skills. Academic readiness for the profession is assessed by the student's ability to successfully pass a retired version of the national PTA licensure exam. Finally, students' behavioral readiness for the profession will be reinforced through review of Catholic social teaching, the Core Values of physical therapy, ethics, leadership and other key behaviors and attitudes that are hallmarks of a St. Catherine University PTA graduate. Prerequisite(s): PTA 2600.

**PTA 2900 Clinical Integration II – 4 credits**

Clinical Integration II will occur during February and March of the second year in the PTA program and includes eight weeks of full days in the clinical setting, using skills acquired throughout the program. Clinical experiences will be performed in a variety of settings under the direction of clinical instructors (CIs) representing a diverse range of knowledge and experience. The purpose of this course is to solidify and synthesize the data collection techniques and technical intervention skills learned in the summer, fall, and spring semesters of the second year, in addition to building upon those skills learned in the first year. This clinical provides the student with full-time hands-on practice in a physical therapy department, encouraging integration and synthesis of previous classroom knowledge. It promotes the student's understanding of the health-care system, allows the student to participate as an active, cooperative member of the health care team, and encourages development of an ethical, holistic practitioner with regard for the whole person in all interactions. Given the student will have completed all of their didactic coursework prior to this course, in addition to a previous 8-week full time clinical experience, they are expected to actively participate in patient/client care conferences, PT staff meetings and in-service opportunities at their clinical sites. Students are expected to learn about and participate appropriately in the facilities' reimbursement and documentation systems. Prerequisite(s): PTA 2700.

**PTA 2900 Clinical Integration II – 4 credits**

Clinical Integration II will occur during February and March of the second year in the PTA program and includes eight weeks of full days in the clinical setting, using skills acquired throughout the program. Clinical experiences will be performed in a variety of settings under the direction of clinical instructors (CIs) representing a diverse range of knowledge and experience. The purpose of this course is to solidify and synthesize the data collection techniques and technical intervention skills learned in the summer, fall, and spring semesters of the second year, in addition to building upon those skills learned in the first year. This clinical provides the student with full-time hands-on practice in a physical therapy department, encouraging integration and synthesis of previous classroom knowledge. It promotes the student's understanding of the health-care system, allows the student to participate as an active, cooperative member of the health care team, and encourages development of an ethical, holistic practitioner with regard for the whole person in all interactions. Given the student will have completed all of their didactic coursework prior to this course, in addition to a previous 8-week full time clinical experience, they are expected to actively participate in patient/client care conferences, PT staff meetings and in-service opportunities at their clinical sites. Students are expected to learn about and participate appropriately in the facilities' reimbursement and documentation systems. Prerequisite(s): PTA 2700.

**PTA 3000 Physical Therapy Leadership – 1 credit**

This course is the first PTA-specific course to be taken in the BSPTA program, and allows the PTA to explore their motivation for pursuing the degree, the changing role of the PTA in the clinical environment, the expectations for PTA leadership as a member of the physical therapy profession, and their current strengths and opportunities for growth as they prepare themselves to fulfill those expectations. Students will apply results of standardized leadership assessment tools and feedback from a chosen mentor to a final reflective paper which identifies their current leadership traits, goals within the BSPTA program, areas of tension and congruence between their personal and professional identity and their expectations for how the program will impact their career path.

**Prerequisite:** Admission to the major.

**PTA 3150 Pharmacology for the Physical Therapist Assistant – 1 credit**

Pathopharmacology introduces the principles and properties of drugs frequently encountered by the PTA. This course presents basic concepts, terminology, and clinical application. Also, we discuss how therapeutic drugs positively and negatively impact rehabilitation. Students relate drug action – both desirable and adverse – to comprehensive patient care. This course reviews patient medications. The content focuses on mechanisms of action, side effects, and uses of selected drugs and drug classes.

**Prerequisite:** Admission to the BS PTA program.

**PTA 3800 Movement System Analysis and Intervention – 3 credits**

This course enhances the PTA's familiarity with the concept of the movement system and the physical therapist's/physical therapist assistant's role as movement experts. Learners will be challenged to further develop their observational, psychomotor, and cognitive skills in order to improve their functional movement analysis skills. They will also develop stronger critical thinking and decision-making skills for selecting the most appropriate interventions to improve movement dysfunctions. The course will emphasize the use of manual therapy as an intervention for movement restrictions and will provide opportunities to practice/demonstrate/receive feedback on multiple manual therapy techniques.

**Prerequisites:** Admission to the major, PTA 3000.

**PTA 4000W Rehab Administration Capstone – 3 credits**

This writing-intensive course provides the PTA with insight into the role of the department manager. Administrative responsibilities addressed in the course include budgeting, hiring and staffing, quality assurance, risk management and outcomes reporting. Discussion and activities will highlight the changing healthcare landscape and the influence of regulation on payment for PT services and the rehab manager's role as a member of the facility administrative team. The PTA will complete a final project that focuses on systems improvement and/or personnel development within the PTA's workplace or their community. The writing assignments in this course will allow the student to develop skills in measuring and articulating the needs/assets of their physical therapy department to staff, supervisors, other health care providers, and to the general public. The PTA will also perform written reassessment of their own strengths and their progress toward the goals established in their PTA 3000 leadership growth plan.

**Prerequisite:** PTA 3000.

**PTA 4684 Directed Study – 4 credits**

Directed study is provided for students whose unusual circumstances prohibit taking a regularly scheduled course but who need the material of that course to satisfy a requirement. Availability of this faculty-directed learning experience depends on faculty time and may be limited in any given term and restricted to certain courses.

**Prerequisites:** Faculty, department chair and dean approval.