

2020 PTA Program Course Descriptions

PTA 101 Introduction to PTA. This course provides an introduction to the role and scope of practice for the physical therapist/physical therapist assistant (PT/PTA). Students begin to learn legal and ethical concepts guiding professional behavior and conduct, develop an awareness of the healthcare delivery system, cultural diversity, evidence-based practice, stress management, work performance and expectations. Students are introduced to the history and role of the American Physical Therapy Association. Students develop skills in using professional terminology for oral and written communications as well as collaboration with peers in a variety of formats. Integration of learning experiences with concurrent technical courses is used to apply and reinforce knowledge. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. 1 credit hour.

PTA 102 Advanced Musculoskeletal and Nervous System Anatomy. This course includes additional study of the musculoskeletal and nervous systems beyond the concepts from general anatomy and physiology. Focus will be on the skeletal system, joint articulations and motions, muscular system, surface anatomy, and peripheral and central nervous systems. This course provides foundational knowledge necessary to prepare to be a physical therapist assistant. Prerequisite: ASC 104 with a grade of “C” or better. Corequisite: ASC 106 with a grade of “C” or better. 2 credit hours.

PTA 115 Basic Patient Care Lab. This lab course provides an introduction to basic physical therapy intervention skills and procedures and provides an opportunity to practice professional behaviors in a lab setting. Principles and concepts pertaining to positioning and draping; body mechanics; transfers; range-of-motion (ROM); aseptic techniques and wound care; bandaging and dressing; vital signs; wheelchairs and patient transporting; gait training; Americans with Disabilities Act (ADA) and massage are included. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. Concurrent: PTA 116. 1 credit hour.

PTA 116 Basic Patient Care. This lecture course provides an introduction to professional behaviors and basic physical therapy intervention skills procedures, and documentation. Principles and concepts pertaining to positioning, transfers, range-of-motion (ROM), aseptic technique, wound care, bandaging and dressing, vital signs, wheelchairs, gait training, Americans with Disabilities Act (ADA), documentation and massage are included. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. Concurrent: PTA 115. 2 credit hours.

PTA 117 Documentation for the PTA. This course examines the purposes of documentation and includes the basic skills needed for a physical therapist assistant (PTA) to document patient care. The relationship between documentation and the patient/client management process is examined with emphasis on the role of the PTA in reading the initial documentation and following the plan of care established by the Physical Therapist and documenting on the care provided. The focus is on problem based medical records with integration of medical terminology and abbreviations to enhance clarity and brevity. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. 1 credit hour.

PTA 118 Functional Anatomy and Kinesiology. This lecture course includes an in-depth study of the structure and function of the musculoskeletal system emphasizing functional aspects of human motion and the biomechanical principles involved. The course also investigates the theoretical basis of various data collection methods including manual muscle testing, goniometric measurements, muscle length, gait and postural assessments, among others. The course incorporates concepts related to the roles of the physical therapist/physical therapist assistant (PT/PTA), use of professional behaviors, and use of appropriate medical

language through written and verbal communications. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. Concurrent: PTA 119. 3 credit hours.

PTA 119 Functional Anatomy and Kinesiology Lab. This lab course provides an introduction to basic physical therapy data collection methods and gives the student the opportunity to practice professional behaviors as well as clinical skills in a lab setting. The student learns principles and procedures related to manual muscle testing, goniometry, muscle length assessment, posture and gait analysis. The application of various concepts related to biomechanics, Newton’s laws of motion, joint structure, the nervous system, and analysis of human motion are also included. The course emphasizes concepts related to the roles of the physical therapist/physical therapist assistant (PT/PTA), use of professional behaviors, and use of appropriate medical language through written and verbal communications. Prerequisites: Acceptance into the PTA program and ASC 104, ASC 106, and PTA 102 with a grade of “C” or better. Concurrent: PTA 118. 1 credit hour.

PTA 121 Physical Agents and Modalities Lab. This lab course provides the physical therapist assistant (PTA) student with opportunities to practice clinical application skills needed to perform thermal and mechanical treatment modalities used in physical therapy. Emphasis is placed on critical thinking and problem solving to assure that the modality is applied according to the physical therapist’s plan of care and to maximize treatment effectiveness. Safety procedures, indications, contraindications, and precautions are learned and applied for each modality. The student learns to use professional and understandable terminology in written and verbal communication and patient education relative to physical agents. Prerequisites: PTA 101, PTA 115, PTA 116, and PTA 117 with a grade of “C” or better. Concurrent: PTA 127. 1 credit hour.

PTA 125 Principles of Therapeutic Exercise Lab. This course introduces the student to the use of exercise as a preventive and treatment mechanism for pathological conditions which influence strength, endurance and flexibility. Students apply principles, design and techniques of therapeutic exercise and functional training. Students will learn to: describe the principles of therapeutic exercise, formulate rationale for the application of and modification of therapeutic exercise, safely and effectively implement therapeutic exercise interventions based on a plan of care established by a physical therapist, measure response to exercise interventions and respond accordingly, demonstrate patient education, and communicate the outcomes of the intervention. Students will learn and practice many types of exercise prior to learning how to apply exercise to specific pathologies. Prerequisites: PTA 101, PTA 115, PTA 116 and PTA 117 with a grade of “C” or better. 1 credit hour.

PTA 127 Physical Agents and Modalities. This lecture course provides the physical therapist assistant (PTA) student with theoretical knowledge and practical information about physical agents in rehabilitation. The basic scientific and physiological principles underlying the application of physical agents are explored. Indications, contraindications, and precautions are learned for each modality. Prerequisites: PTA 101, PTA 115, PTA 116, and PTA 117 with a grade of “C” or better. Concurrent: PTA 121. 1 credit hour.

PTA 129 Health and Disease I. This course is an investigation of disease processes, pharmacology and medical management of cardiovascular, respiratory, musculoskeletal, nervous, autoimmune, lymphatic, and endocrine systems, including geriatric diagnoses commonly seen in physical therapy. The process of inflammation and repair are emphasized. Content includes peripheral vascular disease and amputation, cardiac and pulmonary disorders, arthritis, and diabetes. As each system is examined, clinical manifestations and the possible physical therapy interventions are reviewed. Prerequisites: Acceptance into the PTA program and PTA 102 with a grade of “C” or better. 4 credit hours.

PTA 135 Clinical Practice I. This is a four week (40 hours per week) clinical experience that provides the student with his/her first opportunity for hands-on patient care. The student will apply basic skills learned in the classroom to the clinical setting making the connection between theory and practice. The student will work

under the direct supervision of a licensed physical therapy professional in an assigned/approved facility. This clinical experience provides opportunities for development of appropriate professional behaviors related to the role of the physical therapist assistant (PTA). Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. 2 credit hours.

PTA 201 PTA as a Profession. This course provides an introduction to the profession of a physical therapist/physical therapist assistant (PT/PTA) practice. Students learn case-based legal and ethical concepts guiding professional behavior and conduct in the clinical setting and develop an awareness of professional duty, responsibility, and advocacy. Students are introduced to billing and reimbursement methods and issues in various healthcare settings. Students are introduced to the Missouri State Practice Act. Students are directed toward lifelong learning, productivity, and career development planning. Integration of learning experiences with concurrent technical courses is used to apply and reinforce knowledge as well as educate others about the profession of physical therapist assistant (PTA). Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. 1 credit hour.

PTA 202 Health and Disease II. This course is an investigation of disease processes, pharmacology and medical management of integumentary, gastrointestinal, genitourinary, obstetrics, and oncology diagnoses commonly seen in physical therapy. The disease process and treatment are emphasized. Content includes burns, pregnancy, cancer, obesity, and pediatric conditions. As each system is examined, clinical manifestations and the possible physical therapy interventions are reviewed. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. 1 credit hour.

PTA 204 Electrotherapeutic Modalities. This lecture course addresses the basic principles of electricity and electrotherapy. It investigates the basic physical science, the electrophysiology, and the clinical use of physical therapy electrical modalities. Students will learn to recognize common indications, contraindications, and special precautions to the application of electrotherapeutic modalities. Application of electrotherapeutic agents for pain, neuromuscular stimulation, and tissue/wound healing will be studied. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 205. 1 credit hour.

PTA 205 Electrotherapeutic Modalities Lab. This lab course enables the student to gain competency in the safe and effective application of electrical stimulation modalities currently used in physical therapy practice. Indications, contraindications, and precautions are examined and students have opportunities to problem-solve clinical applications to maximize the benefit of the modality. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 204. 1 credit hour.

PTA 208 Orthopedics for the PTA. This lecture course involves an in-depth study of orthopedic conditions, physical therapy data collection, and interventions for orthopedic and cardiopulmonary clients. Previously learned therapeutic exercise techniques are applied to orthopedic and cardiopulmonary conditions, and the relationship between interventions and anatomical structure, function, and pathophysiology are examined. The student reviews the role of the physical therapist assistant (PTA) as a part of the rehabilitation team related to development and delivery of orthopedic therapeutic exercise. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 211. 2 credit hours.

PTA 211 Orthopedics Lab for the PTA. This lab course provides students with opportunities to create and implement therapeutic exercise programs following the physical therapist (PT) plan of care. Students will apply previously learned therapeutic exercise techniques to orthopedic and cardiopulmonary conditions. The student portrays the role of the physical therapist assistant (PTA) as a part of the rehabilitation team related to development and delivery of orthopedic therapeutic exercise with the instructor and/or lab assistant serving as

the supervising physical therapist (PT). Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 208. 1 credit hour.

PTA 220 Comprehensive Review and Licensure Requirements for the PTA. This course is designed to assist students in preparation to apply and sit for licensure as a physical therapist assistant. Content, scope, and format of the National Physical Therapist Assistant Exam (NPTAE) will be addressed. A licensure exam prep course will be provided as a part of this course. This course will include test-taking skills, study skills, content review, and self-assessment exercises to facilitate preparation for the examination. Prerequisites: PTA 201, PTA 202, PTA 204, PTA 205, PTA 208, PTA 211, PTA 223, and PTA 224 with a grade of “C” or better. 2 credit hours.

PTA 223 Neurological Therapeutic Exercise. This lecture course provides an introduction to the pathology, pathophysiology, medical interventions, testing, and treatments of neurological disease and dysfunction. A general overview of anatomy and physiology of the nervous system as well as adult and pediatric neurologic diseases and dysfunctions signs and symptoms, medical interventions, and specialized testing are included in this course. Principles and concepts pertaining to sensation, perception, motor control, posture, balance, coordination, functional mobility, and ambulation are also included. The student examines theories and techniques of therapeutic intervention commonly used in the treatment of neurologic disease and dysfunction. The course incorporates concepts related to the roles of the physical therapist/physical therapist assistant (PT/PTA), professional behaviors, and the use of appropriate medical language through verbal and written communications. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 224. 3 credit hours.

PTA 224 Neurological Therapeutic Exercise Lab. This lab course provides an introduction to the pathophysiology, medical intervention, and rehabilitation treatment of adult and pediatric neurological disease and dysfunction. Students have the opportunity to practice clinical skills and professional behaviors in a lab setting. Principles and procedures related to motor control, sensation, perception, therapeutic exercise, posture, balance, gait analysis, and gait training are studied using a case-based format. The student explores the role of the physical therapist assistant (PTA) in the treatment of neurological dysfunction, develops effective communication skills for patient/client and family education, and utilizes appropriate medical language through written and verbal communications. Prerequisites: PTA 118, PTA 119, PTA 121, PTA 125, PTA 127, and PTA 129 with a grade of “C” or better. Concurrent: PTA 223. 2 credit hours.

PTA 235 Clinical Practice II. This is a six week (40 hours per week) clinical experience that provides the student with opportunities to provide patient care under the supervision of a licensed physical therapy professional in an assigned/approved facility. The student will apply concepts and skills learned in the classroom to the clinical setting, strengthening the connection between theoretical and foundational knowledge. The student will work with a variety of patients to develop competence in clinical skills and exhibit appropriate professional behaviors related to the role of the physical therapist assistant (PTA) as part of the healthcare team. Prerequisites: PTA 135, PTA 201, PTA 202, PTA 204, PTA 205, PTA 208, PTA 211, PTA 223, and PTA 224 with a grade of “C” or better. 4 credit hours.

PTA 245 Clinical Practice III. This is a six week (40 hours per week) clinical experience that provides the student with opportunities to provide patient care under the supervision of a licensed physical therapy professional in an assigned/approved facility. The student will apply concepts and skills learned in the classroom to the clinical setting, strengthening the connection between theoretical and foundational knowledge. The student will work with a variety of patients to develop competence in clinical skills and exhibit appropriate professional behaviors related to the role of the physical therapist assistant (PTA) as part of the healthcare team. This clinical experience facilitates development of cultural competence, quality assurance, and billing practices. Student will have the opportunity to present and education in-service to the healthcare

team. Prerequisites: PTA 135, PTA 201, PTA 202, PTA 204, PTA 205, PTA 208, PTA 211, PTA 223, and PTA 224 with a grade of “C” or better. 4 credit hours.

PTA 289 Research in Physical Therapy. Students explore types and methods of research as well as sources and means of literature review. A thesis statement is developed and students access and analyze evidence-based research to support their thesis. Other methods of acquiring information may entail book review, medical case study, clinical observation, and discussion with physical therapy practitioners. Prerequisites: PTA 135, PTA 201, PTA 202, PTA 204, PTA 205, PTA 208, PTA 211, PTA 223, and PTA 224 with a grade of “C” or better. 2 credit hours.

PTA 299 Special Topics in Physical Therapist Assistant. Special Topics in Physical Therapist Assistant (PTA) may include instruction on topics not covered in other PTA courses. Topics covered in other PTA courses may also be covered in more depth in this special topics course. Projects may be undertaken in any area related to the major program with credit hours determined by the level and amount of involvement. The minimum involvement required for one credit is 30 contact hours. The specific topic(s), objectives, plan of instruction, and evaluation criteria must be documented in the syllabus; approved by the Department/Division Chair; and filed in the Academic Records Office. Students may complete more than one Special Topics course, provided that the credits earned in this manner do not exceed a total of four (4) credits. 1-4 credit hours.