

# Physical Therapy (DPT) Courses

## **DPT7050 Musculoskeletal Anatomy**

Knowledge of human anatomy and histology is essential for physical therapists to make clinical decisions regarding examination, evaluation, diagnosis and prognosis, as well as developing a plan of care for their patients/clients. This course is an in-depth study of the human body which includes human cadaveric prosection, live palpation on peers, and the use of lecture/discussion. Students apply the knowledge gained during this course to all subsequent physical therapy courses throughout the curriculum. Normal anatomy is examined in the context of its application to patient cases, to understand the complex interaction of human tissues (histology) and organ stressors (including environmental interaction, aging and disease processes) that result in physiological responses that may lead to impairments of the human movement system.

Offered at Providence  
4 Semester Credits

## **DPT7100 Foundations of Evidenced-Based Medicine**

This course provides students with the foundations of evidence-based medicine. Students learn to develop a well thought out, clear and answerable clinical question, conduct a literature search, interpret the literature and draw conclusions based upon their clinical question. Students familiarize themselves with the use of annotation and citation management software, as well as the tenets of experimental design and statistical testing as they relate to different types of clinical research. Students assess the quality of the experimental design and statistical analysis used in the articles they are consuming as evidence-based clinicians.

Offered at Providence  
2 Semester Credits

## **DPT7150 Physical Agents in Physical Therapy**

This course describes the fundamental principles, physiological effects and clinical reasoning skills in the safe and effective use of physical therapy modalities/physical agents. Students practice the application of commonly utilized physical agents including thermotherapy, cryotherapy, ultrasound, mechanical traction, light/laser as well as compression devices/techniques. Manual modalities including basic massage and soft tissue techniques, myofascial and trigger point release is also discussed/practiced.

Offered at Providence  
2 Semester Credits

## **DPT7200 Patient Mobility and Safety**

In this course, students master patient handling activities. At the conclusion of the course, students are able to demonstrate appropriate ways to efficiently and safely teach/perform bed mobility, patient transfers, patient guarding and gait training with/without a variety of assistive devices including manual wheelchair usage. Students develop skills ensuring the use of proper body mechanics and other strategies to avoid injury to themselves and/or their patients.

Offered at Providence  
3 Semester Credits

## **DPT7250 Exercise Physiology and Wellness**

This course enables the student to understand changes in strength, flexibility, endurance and balance over the course of a patient/person's lifetime. Key components of the course include applying concepts of neural adaption/plasticity as well as exercise dosing/loading with physiologic changes due to the aging/disease processes across the lifetime in order to achieve patient and therapeutic goals. The course provides students with an opportunity to explore health and wellness opportunities for the physical therapist.

Offered at Providence  
3 Semester Credits

## **DPT7300 Integrated Clinical Experience and Professional Development I**

The APTA Code of Ethics and Core Values for professionalism serves as the framework for all activities in this course. In addition to spending 15 hours engaged in on-campus professional development activities, students complete 48 hours of integrated clinical experience (ICE) at an off-site clinic in the outpatient orthopedic setting. The ICE experience includes observation of clinical care, participation with known evaluative techniques and treatment interventions, as well as opportunities to practice and develop interpersonal skills and professional behavior, under the supervision of a licensed physical therapist. During an orientation to the full-time clinical experience phase of the program, students submit clinical site placement requests and develop personal clinical learning objectives. Each student creates an online professional profile that will be made available to prospective clinical sites.

Prerequisite(s): DPT7250.  
Offered at Providence  
1 Semester Credit

## **DPT7350 Spine Examination and Treatment**

This course prepares the student to practice entry-level orthopedic physical therapy in the region of the spine, including concussion and post-concussion syndrome. The course includes an in-depth analysis of the evaluation and management of musculoskeletal dysfunction in the region of the spine, including concussion and post-concussion syndrome, throughout the life span. Students critically review existing orthopedic assessment and intervention practices utilizing evidence-based literature combined with patient-defined goals and beliefs. This course emphasizes manual techniques such as mobilization, manipulation, Strain-Counterstrain, muscle energy techniques, and neural mobilization (for assessment and treatment) with evidence-based support. This course requires students to evaluate the patient as a whole, including screening for psychosocial factors, and utilize critical thinking in order to rule out conditions requiring referral to another provider in a direct access environment.

Prerequisite(s): DPT7250.  
Offered at Providence  
5 Semester Credits

## **DPT7400 Extremity Examination and Treatment**

This course prepares the student to practice entry-level orthopedic physical therapy for the extremities. The course includes an in-depth analysis of the evaluation and management of musculoskeletal dysfunction for the extremities throughout the life span. Students critically review existing orthopedic assessment and intervention practices utilizing evidence-based literature combined with patient-defined goals and beliefs. This course emphasizes manual techniques such as mobilization, manipulation, Strain-Counterstrain, and neural mobilization (for assessment and treatment) with evidence-based support. This course requires students to evaluate the patient as a whole, including screening for psychosocial factors, and utilize critical thinking in order to rule out conditions requiring referral to another provider in a direct access environment.

Prerequisite(s): DPT7250.  
Offered at Providence  
5 Semester Credits

## **DPT7450 Biomechanics**

This course complements the DPT Musculoskeletal Anatomy course. It presents students with a comprehensive theoretical framework for understanding normal and abnormal human movement patterns. The course is guided by the concept that in order to treat movement system dysfunction, it is first necessary to understand normal movement, motor control and coordination processes. Students learn the relationship between movement patterns in relation to an individual's functional anatomy, biomechanics, and surrounding environment. Motor control theory is incorporated into the ICF disablement model so that normal age-specific and disease-specific processes can be properly described. The course allows the student to gain a better understanding of aberrant movement patterns/strategies so that they will be better able to develop a comprehensive patient-centric treatment approach across a variety of age groups and conditions.

Prerequisite(s): DPT7250.  
Offered at Providence  
4 Semester Credits

**DPT7500 Diagnostic Imaging**

This course provides the student with an understanding of the capabilities, limitations and clinical implications of diagnostic imaging, including plain radiographs, computed tomography, magnetic resonance imaging (and its many forms), diagnostic ultrasound, and an introduction to electromyography. Students must identify the most appropriate diagnostic imaging test and, when indicated, order and interpret diagnostic images relevant in musculoskeletal assessment and management. Radiologic anatomy, normal variants, and pathological and traumatic conditions are reviewed.

Prerequisite(s): DPT7250.

Offered at Providence

2 Semester Credits

**DPT7600 Orthopedic Culmination and Comprehensive Practicum**

This is the first comprehensive practicum in the DPT curriculum. This course reviews and enhances content taught in semesters 1 and 2 in order to promote entry-level competency. Simulated patients are brought to life using case-based scenarios which require the student to perform a chart review, patient history including psychological and psychosocial screening, systems screening and physical examination. Students use this data to develop a physical therapy diagnosis and comprehensive treatment plan with appropriate progression. Students perform selected physical therapy tests and measures and interventions in order to demonstrate their mastery of evidence-based, entry-level orthopedic physical therapy in a practical setting. This process is designed to simulate the challenges students will face during their full-time clinical experiences. This practicum is the first step in certifying student readiness for their full-time clinical experiences. Students must successfully pass this practicum in order to continue in the curriculum.

Prerequisite(s): DPT7300.

Offered at Providence

2 Semester Credits

**DPT7650 Pharmacology for Physical Therapists**

This course provides the student with an entry-level understanding of pharmacology as it pertains to patients undergoing physical therapy. Emphasis is placed on the study of commonly prescribed drugs and their effects on the human body globally and at the tissue level. Students recognize common drug side effects as well as how the drug may influence their patient's response to physical therapy interventions. Students also learn the principles of pharmacokinetics, pharmacodynamics, dose-response relationships, administration routes, absorption and distribution, biotransformation and excretion, potential drug interactions and toxicology.

Prerequisite(s): DPT7300.

Offered at Providence

2 Semester Credits

**DPT7700 Essentials of Rehabilitation Technology**

This course provides instruction on the concepts and use of technology and its applications commonly found in rehabilitation settings. Students apply concepts of assistive technology that provide alternatives for physical and sensory access, communication, and learning. Students identify and utilize assistive technology to modify tasks or the environment through the application of universal design principles. Students identify barriers and potential solutions based on various case studies and real-life examples.

Prerequisite(s): DPT7300.

Offered at Providence

2 Semester Credits

**DPT7750 Cardiovascular, Pulmonary, Digestive and Endocrine Anatomy**

Students examine the anatomy and histology of the cardiovascular, pulmonary, digestive and endocrine system. Students explore pathological changes in these systems across the life span and their influences on the patient's ability to function and respond to physical therapy interventions.

Prerequisite(s): DPT7300.

Offered at Providence

4 Semester Credits

**DPT7800 PT for Medically Complex Patients**

Students develop an understanding of pathology underlying clinical disease states and involving the major organ systems across the life span. Epidemiological issues are presented and discussed. Principles of multi-system diseases, their prevention, treatment and rehabilitation are examined. Students are introduced to medical diagnostic procedures and their impact on physical therapy practice. In addition, evidence-based wound care solutions are discussed and practiced within the laboratory setting. Students learn to recognize pathology signs and symptoms that are considered "red flags" for serious diseases. Students use problem-solving skills and information about pathology to decide when referral to another healthcare provider or alternative intervention is indicated.

Prerequisite(s): DPT7300.

Offered at Providence

4 Semester Credits

**DPT7850 Medically Complex Culmination and Comprehensive Practicum**

This is the second comprehensive practicum in the DPT curriculum. This course reviews and enhances content taught in semesters 1 through 3 in order to promote entry-level competency. Simulated patients are brought to life using case-based scenarios featuring medically complex (multisystem involvement) patients who also possess orthopedic considerations. Students perform a chart review, patient history including psychological and psychosocial screening, systems screening and physical examination. Students use this data to develop a physical therapy diagnosis and comprehensive treatment plan with appropriate progression. Students perform selected physical therapy tests and measures and interventions in order to demonstrate their mastery of evidence-based, entry-level orthopedic physical therapy in a practical setting. This process is designed to simulate the challenges students will face during their full-time clinical experiences. This practicum is the second step in certifying student readiness for their full-time clinical experiences. Students must successfully pass this practicum in order to continue in the curriculum.

Prerequisite(s): DPT7300.

Offered at Providence

2 Semester Credits

**DPT8050 Integrated Clinical Experience and Professional Development II**

The APTA Code of Ethics and Core Values for professionalism serve as the framework for all activities in this course. In addition to spending 15 hours engaged in on-campus professional development activities, students complete 44 hours of integrated clinical experience (ICE) at an off-site clinic in the outpatient orthopedic setting, and four hours observing the delivery of physical therapy services in the medically complex setting. ICE experiences in settings outside of outpatient orthopedics may be considered based upon the student's interests and site availability. The ICE experience includes observation of clinical care, participation with known evaluative techniques and treatment interventions, as well as opportunities to practice and develop interpersonal skills and professional behavior, under the supervision of a licensed physical therapist. The student begins to understand their role as a member of the larger healthcare team, including the use of support personnel and physical therapist assistants, practice ethical decision-making, consider differential diagnoses based on evaluative findings, and suggest appropriate treatment progressions for non-complex patients.

Prerequisite(s): DPT7850.

Offered at Providence

1 Semester Credit

**DPT8100 Psychologically Informed Physical Therapy**

This course provides the student with a comprehensive look at the multidimensional nature of pain and physical disability, and how these factors influence the patient's function and response to physical therapy interventions. Particular emphasis is placed on pain neuroscience, pain assessment and measurement, the mechanism for conversion of acute pain to chronic pain, screening for psychosocial factors that may be contributing to chronic pain, and utilization of biopsychosocial pain management techniques such as cognitive behavioral therapy, mindfulness technique and pain neuroscience education. Select clinical conditions are examined. Class assignments and testing require students to model the elements of biopsychosocial care in simulated patient situations.

Prerequisite(s): DPT7850.

Offered at Providence

2 Semester Credits

**DPT8150 Neuroanatomy for the Physical Therapist**

This course presents an integrated approach to the general principles of organization and function of the nervous system (autonomic, peripheral and central systems). This course features an in-depth look at the human nervous system, through electronic media and cadaveric prosection, live palpation on peers and the use lecture/discussion. Normal anatomy is examined in the context of applying it to patient cases, to understand the complex interaction of human tissues (histology), physiology, pathophysiology and other stressors (including environmental interaction, aging and disease processes) that result in physiological responses that may lead to impairments of the human movement system. Students are introduced to clinical topics as they relate to neuroscience, including neurological testing, control of posture and balance, pain, muscle tone and spasticity, feedback versus feedforward control, reflex versus voluntary control, control of reaching and locomotion, perception and learning.

Prerequisite(s): DPT7850.

Offered at Providence

3 Semester Credits

**DPT8200 Motor Control**

This course introduces the science of motor control/motor learning, including the neuromotor processes that underlie normal and abnormal movement. Theories of motor learning and mechanisms for acquisition of skill are discussed. Neuromotor and neuropsychological research are investigated, and clinical implications are discussed.

Prerequisite(s): DPT7850.

Offered at Providence

2 Semester Credits

**DPT8250 DPT Elective**

Each student is granted the opportunity to complete up to four electives designed to facilitate their ability to explore physical therapy content areas of interest, beyond the standard curriculum. It can include the choice to obtain additional experience in one or two of the core physical therapy specialties and/or explore lengthier research projects. Students actively engage in applying basic and more advanced physical therapy knowledge, demonstrating and developing their clinical reasoning and communication skills to the evaluation, treatment, and management of common diseases and conditions encountered within the discipline or specialty chosen. Supervised clinical practice experiences occur under the supervision of a program-determined preceptor, clinical instructor or their designee(s). This course can be repeated up to four times throughout the curriculum and can occur within semesters 4, 5 and 8.

Prerequisite(s): DPT7850.

Offered at Providence

2 Semester Credits

**DPT8300 Neurological Examination and Treatment**

This course provides students with information needed to identify, evaluate and treat neurologic diseases and disorders that are commonly seen by physical therapists. From a medical perspective, information includes disease/condition description, etiology, pathology, clinical signs and symptoms, diagnostic procedures, medical management, and precautions or special considerations pertinent to physical therapists. From a physical therapy perspective, specific standardized assessments, diagnostic modalities, evaluation and treatment strategies, techniques and approaches are addressed. The role of the physical therapist is addressed across treatment environments and across the time course or progression of the disease (acute through chronic).

Prerequisite(s): DPT7850.

Offered at Providence

5 Semester Credits

**DPT8350 Neuro Culmination and Comprehensive Practicum**

This is the third comprehensive practicum in the DPT program, which presents a case-based scenario that the student needs to bring from initial interview including screening for psychosocial factors, physical examination, assessment treatment plan development and progression, and the application of appropriate treatment interventions. Cases for this practicum feature orthopedic, medically complex, neurological patients, along with other comorbidities, which the student must address. Students prepare for this practicum by practicing skills in a laboratory setting while exploring the latest evidence-based literature in a classroom setting. Lab experiences are designed around patient cases to provide the student with "real-world scenarios" from which to learn and practice on their peers. This process is designed to be similar to what would be required of the student on their full-time clinical experiences. This practicum is the third step in certifying student readiness for their full-time clinical experiences. Students must successfully pass this practicum in order to continue in the curriculum.

Prerequisite(s): DPT7850.

Offered at Providence

2 Semester Credits

**DPT8400 Integrated Clinical Experience and Professional Development III**

The APTA Code of Ethics and Core Values for Professionalism serve as the framework for all activities in this course. In addition to spending 15 hours engaged in on-campus professional development activities, students complete 48 hours of integrated clinical experience (ICE) at an off-site clinic in the outpatient orthopedic setting, and four hours observing the delivery of physical therapy services in the medically complex and/or neurologic setting. ICE experiences in settings outside of outpatient orthopedics may be considered based upon the student's interests and site availability. The ICE experience includes observation of clinical care and provides an opportunity for students to expand their ability to participate in evaluation and diagnosis, to provide patient/family education, and to deliver known physical therapy interventions to patients under the supervision of a licensed physical therapist. This course prepares students for engaging in the full-time clinical experience phase of the program by developing confidence in clinical practice, strengthening professional identity, and by reviewing performance expectations for full-time clinical experiences. Students synthesize a lifelong learning plan that is facilitated by the development of skills such as self-assessment and metacognitive thinking.

Prerequisite(s): DPT8350.

Offered at Providence

1 Semester Credit

**DPT8450 Healthcare Management**

This course introduces students to the fundamental theories and skills of healthcare management for the physical therapist. This course develops and enhances the student's understanding of the healthcare system, the social and economic forces affecting the healthcare system, and its ability to function effectively. Additionally, the course prepares students to enter the workforce by introducing them to a variety of tools and experiences that enables them to manage organizations, programs, resources and people more effectively. Emphasis in this course is on national and state (Rhode Island and Massachusetts) policies and legislation, managing human resources, marketing, technology and information, accounting and finance, quality, and measuring performance. Students obtain an NPI number for use upon graduation, as part of the requirements of this course.

Prerequisite(s): DPT8350.

Offered at Providence

3 Semester Credits

**DPT8500 Research Seminar I**

This course introduces students to the principles of clinical research. Scientific method and various research designs are presented and scrutinized for applicability and appropriateness. Students refine their ability to perform an effective literature review and critical review of the available research. The history and function of review boards for the protection of human and animal subjects are discussed. Students, Under the direct supervision of faculty, develop either a research question to be answered by performing a systematic review or design a primary research project, in collaboration with faculty, to be completed in Research Seminar II. All research proposed and conducted in the Physical Therapy department is subject to the rules, regulations and approval of the university's Institutional Review Board.

Prerequisite(s): DPT8350.

Offered at Providence

3 Semester Credits

**DPT8550 Pediatric Physical Therapy**

This course enhances the student physical therapists' understanding, exposure, critical evaluation and integration of current best practice towards pediatric physical therapy clinical practice. The readings, class discussions and lectures focus on increasing the students' understanding of typical and atypical development, and how factors affect a child's motor performance. Application of theoretical principles of motor control and neurological development are emphasized in order to enhance understanding of typical motor development, as well as motor development in children with various impairments.

Prerequisite(s): DPT8350.

Offered at Providence

3 Semester Credits

**DPT8600 Physical Therapy for Genitourinary Health**

This course introduces students to male/female genitourinary function and disease as it applies to the physical therapist. Emphasis is on evidenced-based outcome measures and physical therapy genitourinary tests/measures as well as physical therapy interventions to improve genitourinary function in both men and women.

Prerequisite(s): DPT8350.

Offered at Providence

2 Semester Credits

**DPT8650 Comprehensive Skills Review and Qualifying Examination**

This course is a comprehensive curricular review of clinical knowledge and skills necessary for the students to successfully pass their full-time clinical experience courses. The skills review is followed immediately by a qualifying examination. The qualifying examination is a case-based scenario in which the student faces a simulate patient. The student is required to perform a chart/history review, thorough patient interview and physical examination. Students use this information to create a physical therapy diagnosis and prognosis. They then develop a comprehensive treatment plan with progression and demonstrate the application of appropriate treatment interventions based upon their diagnosis. Cases for this qualifying examination encompass content from across the curriculum and feature medically complex patients who may have orthopedic, cardiopulmonary and neurologic issues, along with other comorbidities, which the student is required to address. This is the final step in the process of certifying students as being competent to engage in their three full-time clinical experiences. Student must successfully pass the qualifying examination in order to continue in the curriculum and attend their full-time clinical experiences.

Prerequisite(s): DPT8350.

Offered at Providence

2 Semester Credits

**DPT8700 Clinical Education Experience I**

This course is the first of three full-time clinical experiences in the DPT Program and runs during the final spring semester. Under the supervision of one or two licensed physical therapists, students practice and receive feedback while performing all elements of patient management in either a general practice ambulatory and/or non-ambulatory (i.e., acute care, inpatient rehab, SNF, or homecare) setting. Emphasis is placed on a consistent display of professional behavior, including demonstration of adult learning characteristics, as well as the ability to problem-solve and utilize evidence-based resources to guide clinical practice. Students participate in an online seminar in which relevant clinical issues are discussed.

Prerequisite(s): DPT8650.

Offered at Providence

12 Semester Credits

**DPT8800 Clinical Education Experience II**

This course is the second of three full-time clinical experiences in the DPT Program and runs for a period of 13-weeks during the final summer semester. Under the supervision of one or two licensed physical therapists, students practice and receive feedback while performing all elements of patient management in either a general practice ambulatory and/or non-ambulatory (i.e., acute care, inpatient rehab, SNF, or homecare) setting, or with permission from the director of clinical education, in a specialty setting. Based on clinical site availability, and with permission from the director of clinical education, DPT8800, Clinical Education Experience II, and DPT9200, Clinical Education Experience III, may be combined into a 26-week clinical experience where the student may focus their clinical practice in a single clinical placement/setting. Emphasis is placed on a consistent display of professional behavior, including demonstration of adult learning characteristics, the ability to problem-solve and utilize evidence-based resources to guide clinical practice, and the ability to function effectively as a member of the larger healthcare team. In order to achieve a passing grade for this clinical experience, students are expected to achieve entry-level competence in all aspects of physical therapy service delivery while modeling professional and ethical practice. Students participate in an online seminar in which relevant clinical issues are discussed.

Prerequisite(s): DPT8700.

Offered at Providence

11 Semester Credits

**DPT8850 Research Seminar II**

Students complete the data collection and analysis for the project proposed in DPT8500, Research Seminar I. Students work with faculty and other university resources to begin the process of creating their first draft of their work for dissemination. During this course, students, assisted by faculty, determine the most suitable means of disseminating their results which will occur in the DPT8900, DPT Capstone course. Students utilize AMA format, unless another format is prescribed by the target journal or disseminating body.

Prerequisite(s): DPT8700.

Offered at Providence

1 Semester Credit

**DPT8900 DPT Capstone**

Students complete the formal write-up of their project using the format prescribed by their target disseminating body. Disseminating bodies must be in accordance with APTA guidelines and may include the annual JWU Physical Therapy Research Day, another university- or college-based Research Day, the RIAPTA conference, APTA conference(s) such as the Combined Sections Meeting or the Educator Leadership Conference, or other suitable conferences/events deemed appropriate by the faculty assigned to the student(s).

Prerequisite(s): DPT8700.

Offered at Providence

2 Semester Credits

**DPT9200 Clinical Education Experience III**

This course is the third and final full-time clinical experience in the DPT Program and runs during the first 13-weeks of the final fall semester. Under the supervision of one or two licensed physical therapists, students practice and receive feedback while performing all elements of patient management in either a general practice ambulatory and/or non-ambulatory (i.e., acute care, inpatient rehab, SNF, or homecare) setting, or with permission from the director of clinical education, in a specialty setting. Based on clinical site availability, and with permission from the director of clinical education, DPT8800, Clinical Education Experience II, and DPT9200, Clinical Education Experience III, may be combined into a 26-week clinical experience where the student may focus their clinical practice in a single clinical placement/setting. Emphasis is placed on a consistent display of professional behavior, including demonstration of adult learning characteristics, the ability to problem-solve and utilize evidence-based resources to guide clinical practice, and the ability to function effectively as a member of the larger healthcare team. In order to achieve a passing grade for this clinical experience, students are expected to achieve entry-level competence in all aspects of physical therapy service delivery while modeling professional and ethical practice. Students participate in an online seminar in which relevant clinical issues are discussed. Prerequisite(s): DPT8900.

Offered at Providence

11 Semester Credits

**DPT9500 Licensure Review and PEAT**

This course provides the student a comprehensive didactic review of the curriculum in preparation for the board exam. Students are provided a board review course followed by a JWU DPT-sponsored practice exam and assessment tool (i.e., the PEAT test). Scores of 80% or higher on the PEAT indicate a high likelihood of passing the National Physical Therapy Exam (NPTE). Students who score above 80% are strongly encouraged to continue reviewing for the NPTE but may choose to take the NPTE at their own discretion. Students who score below an 80% on the PEAT may still graduate but are strongly encouraged to not sit for the NPTE until such time as they have been given and completed a student specific remediation/studying plan by the faculty. Students should reference the appropriate section of the Requirements for Progression In and Completion of the Doctor of Physical Therapy Program Policy.

Prerequisite(s): DPT8900.

Offered at Providence

2 Semester Credits