

COURSE DESCRIPTIONS IN THE PROFESSIONAL CURRICULUM

All Physical Therapy courses require admission to the School of Physical Therapy.

DPT 500 Human Anatomy I

DPT 501 Human Anatomy II

Advanced study of the gross structure and histology of the human body. Special emphasis is placed on the musculoskeletal, nervous, cardiovascular and respiratory systems. The course is organized by regions of the body, with the emphasis on the gross anatomy of each region. In addition, the microstructure specific to the tissues discussed will be studied. The course has a lecture and a laboratory component. The lab sessions will involve regional dissection of cadavers, and parallel the information covered in the lecture material. DPT 500: 4 Credits; DPT 501: 3 Credits

DPT 510 Clinical Biomechanics I

DPT 511 Clinical Biomechanics II

DPT 510 and 511 are designed to provide the student with the biomechanical and histological basis for understanding normal and pathological movement. All of DPT 510 and part of DPT 511 are organized by anatomical region, and although each region is discussed as a unit, every effort is made to illustrate continuities among regions. The discussion of each region includes sections on normal biomechanics and the application of biomechanics to pathological motion. Each section incorporates units on goniometry, muscle testing, stretching, design of exercise programs and palpation. The remainder of DPT 511 covers posture, scoliosis, and gait analysis. DPT 510: 4 Credits; DPT 511: 4 Credits

DPT 520 Rehabilitation Neuroscience I

Introduction to clinically relevant neuroscience. Topics include: neuroanatomy, cellular and intercellular physiology, neuroplasticity, development of the nervous system, and the somatic, autonomic, and motor systems. Neural disorders commonly encountered in practice and differential diagnosis are emphasized. Students are expected to fully participate throughout the course in: group discussions of neuroscience, case reports and case studies; inquiry sessions; laboratory and computer-based experiences; and problem-based learning. 4 Credits.

DPT 522 Rehabilitation Neuroscience II

Continuation of Rehabilitation Neuroscience I. Topics include: peripheral nervous system, spinal region, cranial nerves, brain stem region, auditory, vestibular, and visual systems, cerebrum, blood supply to the nervous system, and the cerebrospinal fluid system. An introduction to theories of motor control will be discussed. Neural disorders commonly encountered in practice and differential diagnosis are emphasized. Active learning, as described for DPT 520, continues in this course. 3 Credits.

DPT 530 Physical Agents and Mechanical Modalities

A comprehensive coverage of biophysical principles, physiological effects, clinical techniques and applications with an emphasis on problem solving and clinical decision making. Topics include massage, superficial and deep heat, hydrotherapy, cryotherapy, traction, compression therapies and continuous passive motion, iontophoresis, electrical muscle stimulation, transcutaneous electrical stimulation, biofeedback and an introduction to nerve conduction velocity and electromyography. The course includes lectures, clinical skill laboratories, use of interactive audiovisual programs for clinical decision making, abstract writing and class presentations of current research in physical agents. 3 Credits.

DPT 540 Patient Assessment, Intervention and Therapeutic Exercise

This course is designed to provide the student with basic patient care and technical skills in applying, planning, and progressing exercise programs. Topics include: measurement of vital signs, the science of exercise prescription, range-of-motion, stretching, strengthening, use of various exercise equipment, relaxation, fitness, stress reduction, and assistive gait. A strong emphasis is placed on peer collaboration and solving fundamental clinical problems, including evaluation, assessment, and treatment of functional mobility limitations. 2 Credits.

DPT 542 Principles of Therapeutic Exercise Progression

This course builds upon the technical skill development in designing and applying exercise programs introduced in DPT 540. Appropriate exercise program progression for patients across the lifespan in a variety of settings will be emphasized predominantly through case-based laboratory experiences. Concepts of motor learning that facilitate skill acquisition will also be introduced. This approach will reinforce therapeutic exercise as a procedural intervention to reduce disabilities, functional limitations, and impairments in a variety of patient populations. 2 hours. 3 Credits.

DPT 550 Physiology & Pharmacology

This course is a study of human physiology from the cellular level of metabolic functions to the operation of primary and specialized organ systems. Emphasis is placed on application of physiologic principles to the development of optimal function and efficient human movement. The following areas are stressed: muscle and bone physiology, cardiovascular and respiratory dynamics, renal function, and hormonal control of homeostasis. Pathophysiological changes and medical, surgical and pharmacological management of patients with cardiac, pulmonary, renal and endocrine conditions that interrupt optimal function are also presented. Methods designed to improve performance are discussed and instrumentation frequently used to evaluate cardiac and pulmonary function are presented in the laboratory setting. 4 Credits.

DPT 552 Spanish & Culture for Health Prof I

This course will develop the skills needed to understand and communicate in spoken and written Spanish on a beginning level within the medical setting. In addition, the course will help the student gain a valuable understanding of basic cultural issues related to Spanish-speaking patients of relevance in medical settings. 3 Credits.

DPT 561 Foundations of the PT Profession I

This course introduces the student to the history and sociology of the physical therapy profession and its role in the health care system. Additional areas of study include professionalism and professional behavior, the role of professional organizations, professional writing, learning styles, political aspects of health care, roles of other health professionals, documentation, medical terminology, and the functions of the rehabilitation team. 1 Credit.

DPT 562 Foundations of the PT Profession II

Continuation of documentation, roles of other health care professionals, and professional behavior topics from DPT 561. Additional topics include professional communication, and state and federal health care legislation including HIPAA, Medicare, and licensing boards. 1 Credit.

DPT-570 Clinical Internship I

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 4 Credits.

DPT 590 Research Methods and Statistics

An introduction to the research process. Includes research design, ethical and legal considerations, hypothesis testing, review of statistical analysis and critical reviews of published research. 2 Credits.

DPT 595 Intro to Evidence Based Practice (EBP)

The course will consist of an introduction to evidence based concepts and evaluation of current research literature. There will be presentations by various faculty on EBP topics. Students will critically appraise and write a paper on a research article dealing with a diagnostic test and a paper dealing with therapy. 2 Credits.

DPT 610 Neuromuscular Systems Exam/Intervention

Clinical application of observation skills for motor function within environmental contexts and treatment intervention when a motor problem exists will be explored. Students will develop recognition skills of motor control dysfunction across the life-span, considering one's life "participation" in meaningful contexts and to evaluate these within the International Classification of Functioning, Disability and Health (ICF, WHO, 2002). Treatment interventions presented will include remediation, compensation, facilitation, and motor learning. Clinical decision-making will be developed as the learner selects, applies, and justifies treatment interventions for specific patient-centered functional goals. Documentation, goal writing, and measurement of outcomes will be incorporated. Laboratory components will include identifying typical motor development and abilities across the lifespan, specific pathology, evaluation and treatment of the patient presenting with congenital (spina bifida), traumatic spinal cord injury (SCI), and balance disturbances. In addition, students will gain entry-level competencies in client-centered wheelchair acquisition for achieving independent mobility participation and/or orthotic positioning and support across the life span. During lab sessions, students will practice clinical decision-making and therapeutic interventions specific for the functional

limitations and impairments associated with activity participation in accordance with the ICF framework. 3 Credits.

DPT 611 Adult Neuromuscular: Exam/Intervention

Incidence, etiology and medical management of people with traumatic brain injury, cerebral vascular accident (CVA), Parkinson's disease, Multiple Sclerosis, and other adult onset pathologies will be discussed. Students will learn how to adapt and prioritize their physical therapy examination and interventions for these patient populations. Working with Speech and Language Pathology will be introduced. During lab sessions students will practice: movement analysis; clinical decision making; interventions, within a motor learning framework, specific for the activity limitations and impairments associated with these diagnoses; and documentation. Students will also have the opportunity to work with volunteers who have had a CVA. 3 Credits.

DPT 620 Motor Control & Motor Learning

Introduction to theories in motor control and motor learning. Application of these theories to the clinical practice of physical therapy. Application of research evidence to the treatment of specific clients is emphasized. Topics include: identifying primary problems in motor control, quantifying motor control, types of feedback and feedback schedules, practice conditions, task-oriented practice, strategies for improving ambulation, and disorders of upper limb control. 2 Credits.

DPT 630 Musculoskeletal Exam/Intervention

An in-depth study of musculoskeletal impairments and functional limitations of children and adults. The course includes pathology, medical evaluation and physical therapy examination. Students will also plan and execute therapeutic interventions. The course consists of lecture, laboratory practice, student research, student presentations and problem solving activities. The course is organized by anatomic region. DPT 630 covers the upper and lower extremities. 4 Credits.

DPT 631 Musculoskeletal Exam/Intervention Neck & Trunk

This course covers etiology, pathology, examination and intervention related to conditions of the TMJ, cervical, thoracic, lumbar and pelvic regions of the body. Examination schema will be presented in a regional approach, and will include relevant procedures to screen for medical disease. Intervention techniques will include passive movement, neural tissue mobilization, therapeutic exercise, muscle energy and other clinical techniques. Physical therapy intervention will be directed at resolution of specific impairments and functional limitations, but will also address contributing factors and prophylaxis. 3 Credits.

DPT 640 Clinical Internship II

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 4 Credits.

DPT 641 Clinical Internship III

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 4 Credits.

DPT 645 Orthotics and Prosthetics

Includes upper and lower extremity and trunk orthotic devices and upper and lower extremity prosthetics. The course includes lecture and clinical laboratory practice. 2 Credits.

DPT 650 Infectious, Immune & Metabolic Disorders

This course examines basic cellular and molecular processes that underlie many of the diagnoses encountered as physical therapists. General concepts of pathology are presented with a focus on the pathophysiology and medical conditions of selected organ systems. This course includes the study of inflammation/ immunology, infectious diseases and metabolism. The definition, incidence, etiology, pathogenesis and clinical manifestations are discussed for the most common medical conditions related to each system. Standard medical therapies are discussed, including pharmacological and surgical interventions. An emphasis is placed upon differential screening and recognition of medical complications that require precautions or represent contraindications to physical therapy treatment. In addition this course is designed to provide skills related to medical screening through physical examination and evaluation. 3 Credits.

DPT 651 Integumentary Conditions & Differential Diagnosis

This course is a continuation of DPT 650 and includes the pathophysiology and medical interventions for the gastrointestinal, genitourinary and integumentary organ systems. 2 Credits.

DPT 665 Collaborative Professional Education

This course will develop skills for collaboration and communication within a team of service providers, collaboration with families with diverse cultural and linguistic backgrounds, services to children and youth with significant and multiple disabilities, and support for success of these children and youth within inclusive environments and the general education curriculum. Course participants, representing five different disciplines and specialty areas, will work together in teams to develop and complete a community-based, action research project. 1 Credit.

DPT 670 Psychological Aspects of Illness/Disability

This course presents a survey of emotional, behavioral and social effects of injury, illness or disability on patients, their families and other interpersonal relationships. The interpersonal relationship between health professional and patient is emphasized. Clinical experiences are used as illustrations of theoretical material. 2 Credits.

DPT 680 Geriatrics and Gerontology

This course is an introduction to the issues facing older persons in the areas of health, health care policy and sociocultural expectations. It addresses the issues surrounding the burgeoning aging population; the common pathologies and impairments that are associated with the over 65 population in the context of normal vs. usual aging of the cardiopulmonary, musculoskeletal, neuromuscular and integumentary systems; and documentation and reimbursement in the Medicare system. Discussions will include the benefits of exercise in prevention of and rehabilitation from functional limitations; home assessment, housing options and community resources; communication and education with the elderly; restraint use issues; and the issues surrounding elder abuse. Students will also critique many of the functional assessment tools used with this population. 3 Credits.

DPT 685 Pediatric Neuromuscular: Exam & Intervention

Introduction to typical development of children, with a focus on motor development in the context of changing environments across the age span, and within the cultural considerations of childhood and family. Developmental disability diagnoses associated with impaired motor function from congenital or acquired disorders of the central nervous system or genetic abnormalities in infancy, childhood, and adolescence will be presented. Students will gain an appreciation for age appropriate developmental assessments, standardized instruments, and functional means to evaluate children with disabilities in various settings. Pediatric public school practice will be discussed and an appreciation for working with families and educators will be modeled. 3 Credits.

DPT 690 Educational Strategies for Physical Therapists

Educational strategies for designing and teaching in clinical, community, and academic settings. Learning theory is emphasized with a focus on applications in instruction related to physical therapy. Students select topics to teach to each other, offering constructive critique and support. 3 Credits.

DPT 694 Critically Appraised Topics

Students will work in small groups with a faculty advisor to develop a clinical question relating to diagnosis or treatment and answering that question with a critically appraised paper (CAT) using not more than 3 articles. The CAT will be presented to the class and faculty during the semester. 1 Credit.

DPT 695 Independent Study

This course is intended to allow a student to pursue a specialized or unique interest that is not part of the curriculum, but is related to it. It does not replace any required course. No more than one (1) credit of Independent Study may be taken per semester and no more than five (5) may be taken over the entire program. 1 Credit.

DPT 700 Principles of Management & Supervision for PTs

An in-depth study of service operations management at the organizational and clinical department level is discussed. A focus on the full financial cycle from resource planning and budgeting through reimbursement is emphasized. Basic services of facilities operation and record keeping as well as case management and consulting are addressed. The physical therapist's role as a leader for personal development as well as a human resource manager is discussed. Students learn the process of program and service line development, implementation, marketing, and outcome management. Current regulatory, legal, and policy and procedures that impact practice management are also presented. 4 Credits.

DPT 710 Clinical Reasoning Seminar

This course provides students with the opportunity to integrate their skills for evaluation, planning, and revision of interventions. Live and videotaped demonstrations of examinations and evaluations are presented in class. Small groups of students perform an examination of a patient, justify the tests and measurements performed, perform an evaluation (make clinical judgments), establish a diagnosis and prognosis for the patient, plan therapeutic interventions, and develop a plan for outcomes assessment. The students present the case to an audience of physical therapy students and interested people from the community. Pass/No Pass. 2 Credits.

DPT 720 Clinical Internship IV

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 8 Credits.

DPT 721 Clinical Internship V

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 8 Credits.

DPT 722 Clinical Internship VI

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada. Pass/No Pass. 8 Credits.

DPT 730 Professional Lecture Series

A series of lectures, demonstrations, or workshops focusing on specialties and other areas germane to the practice of physical therapy. Examples of topics included are hand orthotics, clinical education, woman's health issues, professional communication, and industrial/ occupational health. Topics will be presented by faculty and other clinical experts. Pass/No Pass. 2 Credits.

DPT 740 Introduction to Medical Imaging for PTs

The course includes basic principles of radiology and develops a systematic approach to viewing radiographs. The course is interactive in that students will participate in viewing and describing radiographs and discussing findings with the members of the class. An introduction to Magnetic Resonance Imaging (MRI) is also included. Pass/No Pass. 1 Credit.

DPT 750 Bioethics Seminar for PTs

Identification and analysis of ethical issues facing physical therapists in their relationships with patients, peers, the healthcare community, and society as a whole. Pass/No Pass. 2 hours. Credits: 0.25 - 1.00

DPT 790 Evidence Based Capstone Project

Students will use evidence-based principles to develop a clinical question dealing with diagnosis or treatment. Working individually, students will conduct a complete literature review or two smaller reviews using 8-12 (total) research articles. The clinical question will be answered with a written Critically Appraised Topic (CAT) that will be presented with either a platform or a poster presentation to the School of Physical Therapy in the spring of the final year. Pass/No Pass. 1-2 hours. Credits: 1.00 - 2.00

DPT 791 Thesis

Completion of thesis based on an examination of clinical or professional problem using research methodology appropriate to the subject matter. Presented with platform or poster presentation to SPT in spring of the final year. May be completed in place of DPT 790. Pass/No Pass. 2 Credits.

DPT 570	Clinical Internship I	- 4 hours
DPT 640	Clinical Internship II	- 6 hours
DPT 641	Clinical Internship III	- 10 hours
DPT 720	Clinical Internship IV	- 10 hours
DPT 721	Clinical Internship V	- 9 hours

These courses emphasize application and integration of academic/didactic coursework into the clinical setting. Interns are directly supervised by licensed physical therapists in community-based clinical sites available throughout the US and Canada.

DPT 665-02 Understanding Disabilities: An Interdisciplinary Inquiry (Elective)

This course will guide the student to a better understanding of why and how physical and cognitive impairments have led to academic, socioeconomic, and cultural exclusion of persons with disabilities in the U.S. Through readings and matching the students with a community member with a disability for weekly dialogue, the student will gain an understanding of what living with a lifelong disability means. Recognition of the differences and similarities between the lives of persons with and without disabilities and the commonality of current social, political, and cultural formations will be introduced through discussions of pro and con arguments, guest presenters, and autobiographical readings. Through individual journal writings, class presentations and simulations,

students will gain a more humane manner of perceiving physical and cognitive differences. 2 Credits.

DPT 665-03 Seminar on Children: Learning, Living, & Development (Elective)

Through the interdisciplinary sharing of models and frames of reference, students will explore multiple perspectives on children's learning and a variety of means for facilitating that learning. Students will develop a family-centered approach through informal and formal venues with parents, and through sharing concepts of child development with peers from disciplines other than their own. The opportunity to engage on an interdisciplinary team, with the focus being child-environment-occupation interaction, should facilitate individual student study and understanding of child development. 1 Credit.

ESSENTIAL JOB FUNCTIONS FOR PHYSICAL THERAPISTS

The following information is provided to assist you in achieving a better understanding of the cognitive and physical demands of the Pacific University School of Physical Therapy and of the abilities needed to successfully work as a physical therapist (PT). These criteria are based on cognitive and physical abilities identified as being **essential job functions** for PTs and as such, closely match the abilities needed to successfully complete the clinical and didactic component of the physical therapy curriculum.

Essential job functions, performed either with or without reasonable accommodations, must not jeopardize safety (patient or therapist) or quality of care.

COGNITIVE DEMANDS include but are not limited to the ability to:

1. Adapt to frequent changes in work environment and patient/client population.
2. Concentrate and attend to detail amidst a variety of environmental distractions.
3. Process information accurately, thoroughly and quickly.
4. Provide clients with clear instructions, adapted to their cognitive levels and communication needs.
5. Generalize learning from one situation and patient to another, as appropriate.
6. Adapt communication style in order to work with a variety of different supervisors.
7. Interact positively with many professionals possibly including members of the multi-disciplinary team.
8. Prioritize tasks.
9. Read and compose therapy reports, clinical notes, communications to and from other professional team members.
10. Deal with a variety of patient/client ages, behavior, cognitive abilities, cultures and ethnic backgrounds both individually and in groups.
11. Learn and apply new information on methods of treatment, equipment, pathologies, etc. on an on-going basis.

PHYSICAL DEMANDS include but are not limited to the ability to perform the following activities:

1. OCCASIONALLY (1/2-2.5 hours/day): sit, stand in place, walk, twist (knees/waist/neck), climb, push/pull and lift objects of various weights.
2. FREQUENTLY (2.5-5.5 hours per day): crouch (bend at knees), stoop (bend at waist), turn/pivot, reach overhead, pinch (grasp small objects).
3. CONTINUOUSLY (5.5-8 hours per day): be mobile, grasps larger objects.

If you have a disability and need special accommodations, please contact Edna Gehring, Director of Learning Support Services, Student Services (503-352-2107). Information will be kept strictly confidential and used only to assist applicants in obtaining equal access to the application process and/or to perform essential program-related functions.

References:

1. Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapists. Commission on Accreditation in Physical Therapy Education, 1990.
2. Physical Therapist Job Description, St. Vincent's Hospital and Medical Center, Portland, Oregon 1992.