

Entry-Level Doctor of Physical Therapy (DPT) Program Courses

First Year, Summer Semester

DPTR 5001	Clinical Anatomy I	5
DPTR 5002	Foundations in Physical Therapy	2
DPTR 5003	Histology	2
DPTR 5111	Exercise Science	2
DPTR 5201	Clinical Skills: Examination/Evaluation I	1
Total		12 Credits

First Year, Fall Semester

DPTR 5101	Movement Science I	3
DPTR 5141	Human Growth and Development	2
DPTR 5151	Motor Control/Motor Learning	2
DPTR 5161	Psychosocial Aspects of Care I	1
DPTR 5202	Clinical Skills: Examination/Evaluation II	2
DPTR 5203	Clinical Skills: Therapeutic Intervention	4
DPTR 5601	Scientific Inquiry I	1
Total		15 Credits

First Year, Spring Semester

DPTR 5006	Physiology	2
DPTR 5011	Neuroscience	3
DPTR 5162	Psychosocial Aspects of Care II/Interprofessional Ethics*	2
DPTR 5301	Medical Conditions I	2
DPTR 5401	Musculoskeletal Conditions I	3
DPTR 5611	Patient Care Seminar I	2
DPTR 5931	Clinical Education I (4 weeks)	2
Total		16 Credits

Total First Year **43 Credits**

Second Year, Summer Semester

DPTR 6002	Clinical Anatomy II	3
DPTR 6102	Movement Science II	1
DPTR 6402	Musculoskeletal Conditions II	3
DPTR 6501	Neuromuscular Conditions I	3
DPTR 6701	Professional Topics I: Doctoring Profession	1

Total **11 Credits**

Second Year, Fall Semester

DPTR 6121	Pharmacology	1
DPTR 6205	Clinical Skills: Prosthetics and Orthotics	1
DPTR 6403	Musculoskeletal Conditions III	4
DPTR 6502	Neuromuscular Conditions II	3
DPTR 6602	Scientific Inquiry II	2
DPTR 6612	Patient Care Seminar II	1
DPTR 6911	Fieldwork I	1
DPTR 5162	Psychosocial Aspects of Care II/Interprofessional Ethics*	

Total **13 Credits**

Second Year, Spring Semester

DPTR 6302	Medical Conditions II	3
DPTR 6503	Neuromuscular Conditions III	3
DPTR 6603	Scientific Inquiry III	2
DPTR 6702	Professional Topics II: Differential Diagnosis in Practice	2
DPTR 6721	Educational Methods	1
DPTR 6912	Fieldwork II	1
DPTR 6932	Clinical Education II (8 weeks)	3

Total **15 Credits**

Total Second Year **39 Credits**

Third Year, Summer Semester

DPTR 7112	Applied Exercise Science	3
DPTR 7212	Elective	1
DPTR 7604	Scientific Inquiry IV	1
DPTR 7703	Professional Topics III: Leadership in Practice	1
DPTR 7711	Health Care Delivery	4
DPTR 7731	Complementary and Alternative Medicine	1
DPTR 7741	Special Practice Settings**	2

Total **13 Credits**

Third Year, Fall Semester

DPTR 7131	Radiology	1
DPTR 7751	Health Promotion	2

DPTR 7741	Special Practice Settings**	
DPTR 7933	Clinical Education III (16 weeks)	8
Total		11 Credits

Third Year, Spring Semester

DPTR 7613	Patient Care Seminar III	2
DPTR 7934	Clinical Education IV (16 weeks)	8
Total		10 Credits

Total Third Year 34 Credits

Program Total 116 Credits

Course Descriptions

DPTR 5001 CLINICAL ANATOMY I 5 CREDITS

Prerequisite(s): Matriculation in Entry-level Physical Therapy Program

Instructor(s): N. Bookstein, PT, EdD; D. James, PT, MS

A regional approach to the in-depth study of structural and functional anatomy of the musculoskeletal, vascular, and nervous systems of the appendicular skeleton, body walls, thorax, and head and neck. Cross sectional and radiographical anatomy is included. Soft tissue palpation is emphasized.

DPTR 5002 FOUNDATIONS IN PHYSICAL THERAPY 2 CREDITS

Instructor(s): J. Rodriguez, PT, MHS

Introduction to foundational elements of physical therapy, including movement, patient / client centered care, professionalism, evidence-based practice, and disablement / enablement / quality of life. Work with community volunteers to apply concepts to real situations and explore accessibility issues.

DPTR 5003 HISTOLOGY 2 CREDITS

Instructor(s): R. O'Hara, PT, MS; K. Maluf, PT, PhD

Study of cells and tissues of the human body with emphasis on normal function and inflammation /repair in disease and injury. Epithelial tissues, blood, dense connective tissue, cartilage, bone, muscle and nerve emphasized. Mechanical properties of musculoskeletal structures included.

DPTR 5111 EXERCISE SCIENCE 2 CREDITS

Instructor(s): E. Melanson, PhD

Discussion of the effect of exercise on physiologic systems, including measurement of exercise capacity in the clinic and laboratory and the effect of exercise on cardiovascular and pulmonary performance.

DPTR 5201 CLINICAL SKILLS: EXAMINATION/EVALUATION I 1 CREDIT

Instructor(s): D. Stelzner, PT, MBA

Introduction to the process of obtaining a history, performing a systems review and selecting and administering tests and measures to gather data about the patient. Beginning of the examination process with an overview of the patient's functional ability.

DPTR 5101 MOVEMENT SCIENCE I 3 CREDITS

Prerequisite(s): DPTR 5001

Instructor(s): C. Christiansen, PT, PhD

Investigation of movement science with emphasis on biomechanical principles related to human posture and movement. Observational and instrumented analysis of functional movement tasks including normal and abnormal gait.

DPTR 5141 HUMAN GROWTH AND DEVELOPMENT 2 CREDITS

Instructor(s): TBA

Functional movement across the life span. Emphasis on periods of greatest changes in motor behavior. Exploration of factors influencing functional movement, including developmental changes in body systems, physical fitness and activity level. Analysis of movement throughout the life span.

DPTR 5151 MOTOR CONTROL/MOTOR LEARNING 2 CREDITS

Instructor(s): J. Valvano, PT, PhD

Application of current principles of motor learning and motor control to activity-focused physical therapy interventions. Emphasis on variables related to task composition and schedule, the environment, and augmented information that enhance practice of motor skills.

DPTR 5161 PSYCHOSOCIAL ASPECTS OF CARE I 1 CREDIT

Instructor(s): D. Stelzner, PT, MBA

Principles of human interaction beginning with discussion of one's self followed by an introduction to the dynamics involved in professional-patient caring relationships.

DPTR 5202 CLINICAL SKILLS: EXAMINATION/EVALUATION II 2 CREDITS

Prerequisite(s): DPTR 5001, DPTR 5201

Instructor(s): D. Stelzner, PT, MBA

Continuation of examination process including advanced movement tests. Progression to dynamic process of making clinical judgments based on data gathered from the examination. Introduction of the process of diagnosis by organizing into defined syndromes or categories of examination results.

DPTR 5203 CLINICAL SKILLS: THERAPEUTIC INTERVENTION 4 CREDITS

Instructor(s): S. Jordan, PT, MA

Introduction to therapeutic intervention skills, such as basic mobility with and without assistive devices, posture and positioning, therapeutic exercise principles and techniques, soft tissue mobilization, therapeutic modalities, for improving functional mobility and for managing a variety of clinical problems.

DPTR 5601 SCIENTIFIC INQUIRY I 1 CREDIT

Instructor(s): J. Hebert, PT, MS

Course designed to introduce students to concepts and approaches to evidence-based practice including effective searching and reviewing literature materials. Observational study designs (cohort, case-control, and cross-sectional) covered, including evaluative tests and measures for diagnostic tests.

DPTR 5006 PHYSIOLOGY 2 CREDITS

Instructor(s): C. Sladek, PhD; R. O'Hara, PT, MS

Fundamentals of human physiology from basic cellular processes such as membrane support, to the organization and control of organ systems.

DPTR 5011 NEUROSCIENCE 3 CREDITS

Instructor(s): R. Gisbert, MSPT; M. Schenkman, PT, PhD

Principles of neurophysiology and neuroanatomy are introduced. Blood supply, three dimensional topography of the nervous system, sensory and motor tracks of the spinal cord and brainstem, major structures and functions of the diencephalon and cortex are included. Functional correlates are discussed.

**DPTR 5162 PSYCHOSOCIAL ASPECTS OF CARE II/
INTERPROFESSIONAL ETHICS* 2 CREDITS**

Prerequisite(s): DPTR 5161

Instructor(s): D. Stelzner, PT, MBA

Continuation of discussions involving the dynamics of professional-patient caring relationships. Interprofessional student discussions including an introduction to critical reasoning, and reflective deliberation required within ethical dimensions.

**DPTR 5301 MEDICAL CONDITIONS I: CARDIOPULMONARY AND
INTEGUMENTARY 2 CREDITS**

Prerequisite(s): DPTR 5111

Instructor(s): A. Nordon-Craft, PT, MA

Pathology and physical therapy management of cardiovascular and respiratory system diseases, and integumentary conditions across the life span. Review of anatomy, physiology, EKG, exercise testing/training, endurance/cardiac laboratories, cardiac rehabilitation, pulmonary assessment/intervention, wellness and prevention, and burn and wound care.

DPTR 5401 MUSCULOSKELETAL CONDITIONS I 3 CREDITS

Instructor(s): P. Mintken, PT, DPT, OCS

Orthopaedic pathokinesiology of the upper extremity across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of upper extremity orthopaedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.

DPTR 5611 PATIENT CARE SEMINAR I 2 CREDITS

Prerequisite(s): DPTR 5001, DPTR 5003, DPTR 5141

Instructor(s): T. Struessel, PT, DPT, OCS, MTC, MTC

Critical thinking and clinical decision making skills. Application of clinical decision making frameworks and models for clinical practice. Patients with musculoskeletal and medical conditions across the life span emphasized.

DPTR 5931 CLINICAL EDUCATION I 2 CREDITS

Instructor(s): J. Rodriguez, PT, MHS; A. Nordon-Craft, PT, MA; L. Hannen, PT, MHS

Four-week full-time supervised clinical experience. Professional values and behaviors developed, relevant questions raised, knowledge applied, clinical skills practiced.

DPTR 6002 CLINICAL ANATOMY II 3 CREDITS

Prerequisite(s): DPTR 5001, 5101

Instructor(s): N. Bookstein, PT, EdD

A regional approach to the in-depth study of structural and functional anatomy of the musculoskeletal, vascular, lymphatic, and nervous systems of the axial skeleton, abdomen, and pelvis with specific emphasis on the spine and peripheral joints. Abdominal and pelvic viscera are included. Cross sectional and radiographical anatomy is emphasized.

DPTR 6102 MOVEMENT SCIENCE II 1 CREDIT

Prerequisite(s): DPTR 5001, DPTR 5101

Instructor(s): C. Christiansen, PT, PhD

Continued investigation and analysis of observational and instrumented normal and pathological human posture and movement. Format for developing a functional movement performance battery presented and selected movement tests practiced.

DPTR 6402 MUSCULOSKELETAL CONDITIONS II 3 CREDITS

Prerequisite(s): DPTR 5001, DPTR 5401

Instructor(s): P. Mintken, PT, DPT, OCS

Orthopaedic pathokinesiology of the lower extremity across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of lower extremity orthopaedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.

DPTR 6501 NEUROMUSCULAR CONDITIONS I**3 CREDITS**

Prerequisite(s): DPTR 5011

Instructor(s): M. Schenkman, PT, PhD

Frameworks and models used to analyze interrelationships of neuropathology, impairments, and functional loss with neurological conditions across the life span (e.g., spinal cord injury, stroke, cerebral palsy). Neuropathology presented. Implications for examination, and evaluation (including prognosis, diagnosis, and goals) analyzed.

DPTR 6701 PROFESSIONAL TOPICS I: DOCTORING PROFESSION 1 CREDIT

Prerequisite(s): DPTR 5002

Instructor(s): M.J. Rapport, PT, PhD

Exploration of professional issues including the doctoring profession; professional core values and scope of practice; connection with the APTA as our professional organization and introduction to legislation and advocacy in health care.

DPTR 6121 PHARMACOLOGY**1 CREDIT**

Instructor(s): R. Page, PharmD; T. French, PhD; N. Bookstein, PT, EdD

Designed to help the learner utilize pharmacological information in planning patient care.

Principles of pharmacodynamics and pharmacokinetics precede information regarding mechanisms of action, adverse effects, and implications for exercise. Other physical therapy interventions for different drug classes are included.

DPTR 6205 CLINICAL SKILLS: PROSTHETICS AND ORTHOTICS 1 CREDIT

Prerequisite(s): DPTR 5401, DPTR 6402, DPTR 6501

Instructor(s): C. Johnson, PT, CHT

Evaluation and management of common upper and lower extremity amputees. Principles of evaluation and prescription of upper/lower extremity prostheses and lower extremity/spinal orthoses for individuals across the lifespan in physical therapy clinical practice.

DPTR 6403 MUSCULOSKELETAL CONDITIONS III**4 CREDITS**

Prerequisite(s): DPTR 6402

Instructor(s): P. Mintken, PT, DPT, OCS; R. O'Hara, PT, MS; D. James, MSPT, OCS, CSCS

Orthopaedic pathokinesiology of the spine across the life span. Pathogenesis, clinical presentation, medical and surgical management, and rehabilitation of spinal orthopaedic disorders. Radiologic and pharmacologic applications with implications for physical therapy intervention.

DPTR 6502 NEUROMUSCULAR CONDITIONS II**3 CREDITS**

Prerequisite(s): DPTR 6501

Instructor(s): R. Gisbert, MSPT; W. Kriekels, PT, NCS; M. Schenkman, PT, PhD

Principles of PT management for individuals with neurological conditions across the life span. Clinical decision making and clinical skills for examination, evaluation, and intervention with individuals with a variety of neurological disorders (e.g., spinal cord injury, stroke, multiple sclerosis) emphasized.

DPTR 6602 SCIENTIFIC INQUIRY II**2 CREDITS**

Prerequisite(s): DPTR 5601

Instructor(s): J. Hebert, PT, MS

Experimental and quasi-experimental study designs (group and single subject) with delineation of the application and analysis of appropriate test statistics (parametric and non-parametric). Survey and qualitative research approaches presented. Application of evidence-based practice continued.

DPTR 6612 PATIENT CARE SEMINAR II**1 CREDIT**

Prerequisite(s): DPTR 5611

Instructor(s): T. Struessel, PT, DPT, OCS, MTC

Development of critical thinking and clinical decision making skills continued. Differential diagnosis, management of individuals with complex diagnoses and disorders affecting multiple systems across the life span. Social and emotional disability, participation in leisure, work, and family activities emphasized.

DPTR 6911 FIELD WORK I**1 CREDIT**

Instructor(s): L. Hannen, PT, MHS; J. Rodriguez, PT, MHS

Approximately one day per week in clinical settings during the fall semester to continue to develop and apply the knowledge, skills, and behaviors learned in the classroom to real situations working with patients and clients.

DPTR 6302 MEDICAL CONDITIONS II: RHEUMATOLOGY AND ONCOLOGY**3 CREDITS**

Prerequisite(s): DPTR 5111, DPTR 5301

Instructor(s): A. Nordon-Craft, PT, MA

Pathology and physical therapy management of individuals with oncologic, metabolic, bariatric, rheumatologic, and psychiatric disorders across the life span. Differential diagnosis, screening, and referral to appropriate personnel will be addressed.

DPTR 6503 NEUROMUSCULAR CONDITIONS III**3 CREDITS**

Prerequisite(s): DPTR 6502

Instructor(s): TBA

Principles of PT management for individuals with neurological conditions continued. Refinement of clinical decision making and skills for individuals with disorders such as Parkinson's disease, vestibular dysfunction, and pediatric conditions. Return to community and quality of life emphasized.

DPTR 6603 SCIENTIFIC INQUIRY III**2 CREDITS**

Prerequisite(s): DPTR 6602

Instructor(s): J. Hebert, PT, MS

Methods of scientific inquiry and evidence-based practice to analysis of patient care for patients with a variety of conditions and diagnoses applied. Evidence for use of measures and intervention approaches emphasized.

DPTR 6702 PROFESSIONAL TOPICS II: DIFFERENTIAL DIAGNOSIS IN PRACTICE 2 CREDITS

Prerequisite(s): DPTR 6502, DPTR 6302

Instructor(s): S. Jordan, PT, MA

Differential diagnosis in primary care physical therapy within a collaborative healthcare model. Synthesis of critical thinking and clinical decision making for efficient screening/examination to determine the need for referral to other health providers, for physical therapy management, or both.

DPTR 6721 EDUCATIONAL METHODS 1 CREDIT

Instructor(s): M.J. Rapport, PT, PhD

Application of learning theories and teaching strategies to patient education and clinical practice. Emphasis on patient/client and family education, including home programs, clinical teaching, and presentations in community and physical therapy settings. Knowledge of learning styles and teaching is enhanced and applied to physical therapy.

DPTR 6912 FIELD WORK II 1 CREDIT

Prerequisite(s): DPTR 6911

Instructor(s): J. Rodriguez, PT, MHS

Exploration of issues surrounding access to health care, with an emphasis on underserved populations and persons, who have limited access. Service project included.

DPTR 6932 CLINICAL EDUCATION II 3 CREDITS

Prerequisite(s): DPTR 6912

J. Rodriguez, PT, MHS; A. Nordon-Craft, PT, MA; L. Hannen, PT, MHS

Eight-week full-time supervised clinical experience. Experience emphasizes students beginning to make the transition from student or "aide" to taking on the responsibility of the professional physical therapist.

DPTR 7112 APPLIED EXERCISE SCIENCE 3 CREDITS

Prerequisite(s): DPTR 5111, DPTR 5301, DPTR 6302

Instructor(s): J. Stevens, PT, PhD, MPT

Complex patients with multi-system disease emphasized. Differential diagnosis, screening and referral to appropriate personnel. Physical therapy management principles of complex medical patients, including exercise prescription, biomechanical principles, and chronic disability issues.

DPTR 7212 ELECTIVE 1 CREDIT

DPTR 7604 SCIENTIFIC INQUIRY IV 1 CREDIT

Prerequisite(s): DPTR 6603

Instructor(s): J. Stevens, PT, PhD, MPT

Advanced evaluation of the scientific literature encompassing a diverse selection of research types and designs applied to a variety of patient conditions. Evidence-based practice project completed. Measures and interventions for patients with specific clinical conditions and diagnoses proposed.

**DPTR 7703 PROFESSIONAL TOPICS III: LEADERSHIP
IN PRACTICE**

1 CREDIT

Prerequisite(s): DPTR 6702

Instructor(s): M.J. Rapport, PT, PhD

More advanced concepts related to the doctoring profession and leadership in practice. Role of leaders and leadership in physical therapy and health care. Leadership styles and perspectives are explored as are differences between leadership and management. Leadership plans emphasize the steps towards becoming a leader.

DPTR 7711 HEALTH CARE DELIVERY

4 CREDITS

Instructor(s): T. Struessel, PT, DPT, OCS, MTC, MTC

Health care systems will be reviewed and discussed with a focus on trends and issues that impact the practice of physical therapy in diverse health care settings. Insurance issues and licensure/regulation of physical therapists, as well as supervision issues in the clinic will be covered. Communication between individuals and across systems will be explored along with team structure and function. Organization and administration of physical therapy services will be addressed covering concepts of business management, marketing, human resources, risk management, financial management, difficult communication situations/referrals. Additional topics include a comparison of the healthcare system in the US and other nations, and resume writing/interview preparation/deciding on a new position after graduation.

DPTR 7731 COMPLEMENTARY AND ALTERNATIVE MEDICINE

1 CREDIT

Instructor(s): S. Jordan, PT, MA

Introduction to the major concepts and issues related to complementary and alternative medicine (CAM). Discussions related to incorporating evidence based CAM for effective patient centered care across the life span.

DPTR 7741 SPECIAL PRACTICE SETTINGS

2 CREDITS

Instructor(s): TBA; A. Nordon-Craft, PT, MA, Cindy Johnson, PT, CHT

Exploration of physical therapist's unique roles in a variety of practice settings including, but not limited to, occupational medicine, geriatrics, pediatrics, assisted living, home care, acute care and end-of-life care. Legal issues such as Individuals with Disabilities Education Improvement Act and abuse/neglect topics will be discussed.

DPTR 7131 RADIOLOGY

1 CREDIT

Prerequisite(s): DPTR 5401, DPTR 6402, DPTR 6403

Instructor(s): V. Akuthota, MD; D. James, MSPT, OCS, CSCS; P. Mintken, PT, DPT, OCS

Study of the application and integration of diagnostic imaging to physical therapy clinical decision making. Provides the physical therapy student with the background to understand diagnostic imaging technology, indication, evaluative value and limitations. Musculoskeletal pathology emphasized.

DPTR 7751 HEALTH PROMOTION**2 CREDITS**

Prerequisite(s): DPTR 5111, 7112

Instructor(s): E. Melanson, PhD; C. Figuers, PT, EdD; C. Jankowski, PhD; J. Stevens, PT, PhD
Critiquing and designing fitness, wellness, and nutrition programs that are appropriate for physical therapy for well populations and people with disabilities across the life span. Focus is on the well elderly and populations with obesity, coronary heart disease, diabetes, and cancer.

DPTR 7933 CLINICAL EDUCATION III**8 CREDITS**

Prerequisite(s): DPTR 6932

Instructor(s): J. Rodriguez, PT, MHS; A. Nordon-Craft, PT, MA; L. Hannen, PT, MHS
Sixteen-week full-time supervised clinical experience. Exploration of general or specialty areas of physical therapy practice. Skills developed throughout earlier experiences demonstrated as entry-level competency in physical therapy practice by the end of this experience.

DPTR 7613 PATIENT CARE SEMINAR III**2 CREDITS**

Prerequisite(s): DPTR 6612

Instructor(s): T. Struessel, PT, DPT, OCS, MTC, MTC

Critical thinking and clinical decision making skill development continued and applied to actual patients. Written case analyses are completed; oral presentations.

DPTR 7934 CLINICAL EDUCATION IV**8 CREDITS**

Prerequisite(s): DPTR 7933

Instructor(s): J. Rodriguez, PT, MHS; A. Nordon-Craft, PT, MA; L. Hannen, PT, MHS
Sixteen-week full-time supervised clinical experience. Full preparation of students to transition to the work force. Publishable case report prepared by the end of this experience, which is linked to DPTR 7613.

INDEPENDENT STUDY**1-3 CREDITS**

Instructor(s): PT Faculty

An Independent Study option is available each semester. This course provides students with an opportunity to pursue content of their own choosing under guidance of a faculty mentor.

*DPTR 5162 Psychosocial Aspects of Care II/Interprofessional Ethics: Psychosocial Aspects of Care II completed during the First Year, Spring Semester; Interprofessional Ethics completed during the Second Year, Fall Semester.

**DPTR 7741 Special Practice Settings started during the Third Year, Summer Semester and completed during the Third Year, Fall Semester.