

**PHYSICAL THERAPY PROGRAM**  
**DOCTOR OF PHYSICAL THERAPY (DPT) COURSES**

**Entry Level DPT**

<b>FIRST YEAR, Summer Semester</b>
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**DPTR 5001 Clinical Anatomy I**

**5.0 cr.**

N. Bookstein, PT, EdD; D. James, PT, MS. Prereq: matriculation in entry-level Physical Therapy Program.

Regional approach to in-depth study of structural and functional anatomy of the musculoskeletal, vascular, lymphatic, and nervous system anatomy of the appendicular skeleton, body walls, thorax, head and neck. Includes cross sectional and radiographical anatomy. Soft tissue palpation is emphasized.

**DPTR 5002 Foundations in PT**

**2.0 cr.**

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**

**2.0 cr.**

M. Schenkman, PhD, DPT, FAPTA

Study of cells and tissues of the human body with emphasis on normal function followed by the tissue/structure response in disease, injury and repair. Emphasis on integument, nerve, and musculoskeletal structures, including basic mechanical properties of the latter.

**DPTR 5111 Exercise Science**

**2.0 cr.**

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 Clin Skills Exam/Eval I**

**1.0 cr.**

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.

<b>FIRST YEAR, Fall Semester</b>
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**DPTR 5101 Movement Science I**

**3.0 cr.**

C. Christiansen, PT, PhD Prereq: DPTR 5001.

Investigation of movement science, with emphasis on biomechanical principles, related to human posture and movement. Observational analysis of functional movement tasks including normal gait, abnormal gait. Explanation of observational movement analysis with kinematics and kinetics measured with instrumentation.

**DPTR 5141 Human Growth/Development**

**2.0 cr.**

L. Dannemiller, PT, DSc, PCS

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/Learning**

**2.0 cr.**

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 Psychosoc Aspects Care I**

**1.0 cr.**

D. Stelzner, PT, MBA

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

**DPTR 5202 Clin Skills Exam/Eval II**

**2.0 cr.**

D. Stelzner, PT, MBA Prereq: DPTR 5001, DPTR 5201.

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 Clin Skills Ther Interv**

**4.0 cr.**

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**

**1.0 cr.**

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 5721 Educational Methods**

**1.0 cr.**

M.J. Rapport, PT, PhD

Application of learning theories and teaching strategies to clinical practice, individual patients and populations. Emphasis on patient/client and family education, including home programs, clinical teaching, and presentations in clinic and community settings related to health promotion and prevention.

<b>FIRST YEAR, Spring Semester</b>
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**DPTR 5006 Physiology**

**2.0 cr.**

C.Sladek, PhD; TBD

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

**DPTR 5011 Neuroscience**

**3.0 cr.**

R. Gisbert, MSPT

Principles of neurophysiology and neuroanatomy 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 disencephalon and cortex are included. Functional correlates are discussed.

**DPTR 5162 Psychosoc Aspect Care II**

**2.0 cr.**

D. Stelzner, PT, MBA Prereq: DPTR 5161.

Continuation of values and caring. Issues related to: health behaviors; grief, mourning and loss; suicide; body image and sexuality; cultural awareness; depression; chronic pain and the diversity in pain management approaches; spirituality and healing; ethical principles, ethical reasoning using case analysis.

**DPTR 5301 Medical Conditions I**

**2.0 cr.**

A.Nordon-Craft, PT, MA Prereq: DPTR 5111.

Pathology and physical therapy management of individuals with cardiovascular, pulmonary, and integumentary disorders across the life span. Exercise testing/training, EKG interpretation, cardiac and pulmonary assessment and intervention, and burn wound care will be addressed.

**DPTR 5401 Musculoskeletal Cond I**

**3.0 cr.**

P. Mintken, PT, MS, 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**

**2.0 cr.**

T. Struessel, PT, DPT, OCS, MTC; M. Schenkman, PT, PhD, FAPTA

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

**DPTR 5931 Clinical Education I**

**2.0 cr.**

J. Rodriguez, PT, MHS

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

<b>SECOND YEAR, Summer Semester</b>
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**DPTR 6002 Clinical Anatomy II**

**3.0 cr.**

N. Bookstein, PT, EdD Prereq: DPTR 5001, DPTR 5101, DPTR 5011.

Regional approach to in-depth study of structural/functional anatomy of the musculoskeletal, vascular, lymphatic and nervous systems of the axial skeleton, abdomen and pelvis. Specific emphasis on the spine and peripheral joints. Cross sectional and radiographical anatomy is included.

**DPTR 6102 Movement Science II****1.0 cr.**

C. Christiansen, PT, PhD Prereq: DPTR 5001, DPTR 5101.

Continued investigation and application of movement science in physical therapy practice with emphasis on age-associated changes in movement, qualitative and quantitative movement analysis, and tests and measures of functional activity.

**DPTR 6402 Musculoskeletal Cond II****3.0 cr.**

P. Mintken, PT, MS, DPT, OCS Prereq: DPTR 5001.

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

**DPTR 6501 Neuromuscular Cond I****3.0 cr.**

R. Gisbert, MSPT Prereq: DPTR 5011.

Frameworks and models used to analyze interrelationships of neuropathology, impairments, and functional loss with neurological conditions across the life span (e.g. multiple sclerosis, lower motor neuron diseases, stroke). Neuropathology presented. Implications for examination, and evaluation (including prognosis, diagnosis, and goals) analyzed.

**DPTR 6701 Doctoring Profession****1.0 cr.**

M.J. Rapport, PT, PhD Prereq: DPTR 5701.

Exploration of professional issues including the doctoring profession, professional core values and scope of practice, and connection with the APTA as our professional organization. Introduction to legislation and advocacy in health care, cultural competence, and professional development are emphasized and explored.

<b>SECOND YEAR, Fall Semester</b>
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**DPTR 6121 Pharmacology****1.0 cr.**

N. Bookstein, PT, EdD

Online course 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, implications for exercise and other physical therapy interventions for different drug classes included.

**DPTR 6205 Clin Skills Pros/Orthos****1.0 cr.**

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 Cond III****4.0 cr.**

P. Mintken, PT, MS, DPT, OCS Prereq: DPTR 5401, DPTR 6402.

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

**DPTR 6502 Neuromuscular Cond II****3.0 cr.**

R. Gisbert, MSPT Prereq: DPTR 6501.

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, Parkinson's, vestibular pathology) emphasized.

**DPTR 6602 Scientific Inquiry II****2.0 cr.**

J. Hebert, PT, MS Prereq: DPTR 6601.

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****1.0 cr.**

T. Struessel, PT, DPT, OCS, MTC Prereq: DPTR 6611.

Development of critical thinking and clinical decision making skills across the life span continued. Differential diagnosis, management of individuals with multiple underlying conditions (e.g., musculoskeletal, neuromuscular), and patients with diagnoses that are not specifically addressed in PT management courses emphasized.

**DPTR 6911 Field Work I****1.0 cr.**

L. Hannen, PT, MHS; J. Rodriguez, PT, MHS Prereq: DPTR 6161.

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.

<b>SECOND YEAR, Spring Semester</b>
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- DPTR 6302 Medical Conditions II** **3.0 cr.**  
 A. Nordon-Craft, PT, MA Prereq: DPTR 5111.  
 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 Cond III** **3.0 cr.**  
 L. Dannemiller, PT, DSc, PCS Prereq: DPTR 6502.  
 Principles of PT management for individuals with neurological conditions continued. The focus of this semester is pediatric neuromuscular conditions.
- DPTR 6603 Scientific Inquiry III** **2.0 cr.**  
 J. Hebert, PT, MS Prereq: DPTR 6602.  
 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 Differential Diagnosis** **2.0 cr.**  
 S. Jordan, PT, MA Prereq: DPTR 5701.  
 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 6912 Field Work II** **1.0 cr.**  
 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** **3.0 cr.**  
 J. Rodriguez, 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.

<b>THIRD YEAR, Summer Semester</b>
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- DPTR 7112 Applied Exercise Science** **3.0 cr.**  
 J. Stevens, PT, PhD Prereq: DPTR 5111, DPTR 5301, DPTR 6302.  
 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** **1.0 cr.**  
 PT Core and Clinical Faculty  
 Various topics; provides students with the opportunity to explore selected topics, related to clinical practice, in depth or topics that are outside of the scope of the set curriculum.
- DPTR 7604 Scientific Inquiry IV** **1.0 cr.**  
 J. Stevens, PT, PhD Prereq: DPTR 6603.  
 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 Leadership in Practice** **1.0 cr.**  
 M.J. Rapport, PT, PhD Prereq: DPTR 6702.  
 More advanced concepts related to doctoring profession and leadership. Role of leaders and leadership in physical therapy and health care. Leadership styles and perspectives, and differences between leadership and management are explored. The steps towards becoming a leader are emphasized.
- DPTR 7711 Health Care Delivery** **4.0 cr.**  
 T. Struessel, PT, DPT, OCS, 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. Communication between individuals and across systems will be explored along with team structure and function.
- DPTR 7731 Compl/Alternative Med** **1.0 cr.**  
 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 Setting](#)**

**[2.0 cr.](#)**

L. Dannemiller, PT, DSc, PCS; A. Nordon-Craft, PT, MA; C. Johnson, PT, CHT

Exploration of physical therapist's roles in a variety of practice settings. Legal issues such as Individuals with Disabilities Education Improvement Act and abuse/neglect topics will be discussed.

<b>THIRD YEAR, Fall Semester</b>
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**DPTR 7131 [Radiology](#)**

**[1.0 cr.](#)**

D. James, PT, MS, 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](#)**

**[2.0 cr.](#)**

E. Melanson, PhD; C. Figuers, PT, EdD; C. Jankowski, PhD

Critiquing/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](#)**

**[8.0 cr.](#)**

J. Rodriguez, 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.

<b>THIRD YEAR, Spring Semester</b>
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**DPTR 7613 [Patient Care Seminar III](#)**

**[2.0 cr.](#)**

T. Struessel, PT, DPT, OCS, MTC Prereq: DPTR 6612.

Critical thinking and clinical decision making skill development continued and applied to patients 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 7934 [Clinical Education IV](#)**

**[8.0 cr.](#)**

J. Rodriguez, 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.

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**[Independent Study](#)**

**[1.0-3.0 cr.](#)**

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.

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<b>TRANSITION DPT</b>
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**DPTR 8004 [Applied Histology](#)**

**[1.0 cr.](#)**

R. O'Hara, MS, PT

This course provides the opportunity for students to learn about histology and concepts of tissue healing as applied to clinical physical therapy practice.

**DPTR 8111 [Evidence-Based Practice](#)**

**[3.0 cr.](#)**

J. Valvano, PT, PhD Prereq: Research knowledge base/course work.

Introduction to principles of evidence-based practice. Application of evidence-based principles to prognosis, diagnosis, and intervention in physical therapy practice. Focus on finding and critically appraising evidence for physical therapy interventions.

**DPTR 8112 [Professional Development](#)**

**[2.0 cr.](#)**

M.J. Rapport, PT, PhD

Study and application of principles of the doctoring profession of physical therapy. Roles of leaders in leadership and management positions in physical therapy and healthcare. Emphasis on plans for ongoing professional growth.

**DPTR 8152 Motor Control Learning**

**1.0 cr.**

J. Valvano, PT, PhD

Current concepts in motor control and motor learning relevant to physical therapy practice are reviewed through guided independent study and online tutorials. Emphasis is on updating the theoretical base required for application of these concepts to clinical practice.

**DPTR 8211 Patient Care Seminar I**

**2.0 cr.**

M. Schenkman, PT, PhD Prereq: Research knowledge base/course work. Pre/Coreq: DPTR 8111.

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

**DPTR 8212 Radiology**

**1.0 cr.**

D. James, MSPT, OCS, CSCS

Application and integration of diagnostic imaging to physical therapy clinical decision making. Students learn to interpret and evaluate pertinent diagnostic imaging studies and recognize when it may be appropriate to refer patients for further testing. Musculoskeletal pathology emphasized.

**DPTR 8213 Health Promotion**

**2.0 cr.**

E. Melanson, PhD

Critiquing and designing fitness, wellness, and nutrition programs that are appropriate for physical therapy for well populations and people with disabilities. Focus on the well elderly and populations with obesity, coronary heart disease, diabetes, and cancer.

**DPTR 8312 Patient Care Seminar II**

**2.0 cr.**

M. Schenkman, PT, PhD Prereq: DPTR 8211.

Seminar providing students with opportunities to refine critical thinking and clinical decision making skills and to integrate critical issues related to physical therapy care of complex patients. Written and oral presentation of case content emphasized.

**DPTR 8313 Pharmacology**

**1.0 cr.**

R. Page, PharmD; T. French, PhD

Online course designed to help the learner utilize pharmacological information in planning patient care. Principles of pharmacodynamics and pharmacokinetics, information regarding mechanisms of action, adverse effects, implications for exercise and other physical therapy interventions for different drug classes included.

**DPTR 8314 Differential Diagnosis**

**2.0 cr.**

S. Jordan, PT, MA

This online course encompasses 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, or both.

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**Independent Study**

**1.0-3.0 cr.**

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.

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