Physiotherapy Program
University of Colorado Denver | Anschutz Medical Campus
Doctor of Physical Therapy (DPT) Courses 2013-14

Entry Level DPT

FIRST YEAR, Summer Semester

**DPTR 5001 Clinical Anatomy I**
N. Bookstein, PT, EdD; M. Pascoe, PhD
Prereq: matriculation in entry-level Physical Therapy Program.
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 PT**
J. Rodriguez, PT, MHS
Introduction to foundational elements of physical therapy, including movement, patient/client centered care, professionalism, and evidence-based practice.

**DPTR 5003 Histology**
K. Maluf, PT, PhD; D. Malone, PT, PhD
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**
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.

FIRST YEAR, Fall Semester

**DPTR 5101 Movement Science I**
C. Christiansen, PT, PhD
Prereq: DPTR 5001.
Investigation of movement science with emphasis on foundational biomechanical principles related to human posture and movement. Qualitative and quantitative movement analysis is presented with emphasis on clinical application.

**DPTR 5141 Human Growth/Development**
L. Dannemiller, PT, DSc
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**
W. Kriekles, PT, DPT, NCS
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**
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. Emphasis on self concept, compassion, caring, honesty, suffering, and what it means to be ill.

**DPTR 5201 Clin Skills: Exam/Eval I**
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.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DPTR 5203</td>
<td>Clin Skills Ther Interv</td>
<td>4.0 cr.</td>
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<td>S. Jordan, PT, MA</td>
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<td></td>
<td>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.</td>
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<tr>
<td>DPTR 5601</td>
<td>Scientific Inquiry I</td>
<td>1.0 cr.</td>
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<td>J. Hebert, PT, PhD</td>
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<td>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.</td>
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<tr>
<td>DPTR 5721</td>
<td>Educational Methods</td>
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<td>M.J. Rapport, PT, DPT, PhD</td>
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<td>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 educational presentations in clinic and community settings.</td>
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**FIRST YEAR, Spring Semester**

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<tr>
<td>DPTR 5006</td>
<td>Physiology</td>
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<td>C. Sladek, PhD; D. Malone, PT, PhD</td>
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<td>Fundamentals of human physiology from basic cellular processes such as membrane support, to the organization and control of organ systems.</td>
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<tr>
<td>DPTR 5011</td>
<td>Neuroscience</td>
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<td>R. Gisbert, PT, DPT</td>
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<td></td>
<td>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 diencephalon and cortex are included. Functional correlates are discussed.</td>
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<td>DPTR 5162</td>
<td>Psychosoc Aspect Care II</td>
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<td>D. Stelzner, PT, MBA</td>
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<td>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. Ethical reasoning and analysis in an interprofessional small group.</td>
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<td>DPTR 5301</td>
<td>Medical Conditions I</td>
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<td>D. Malone, PT, PhD</td>
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<td>Pathology and physical therapy management of individuals with cardiovascular, pulmonary, gastrointestinal, genitourinary, and metabolic disorders across the life span. Exercise testing/training, EKG interpretation, cardiac and pulmonary assessment and intervention, medical management, and implications for physical therapy are emphasized.</td>
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<td>DPTR 5401</td>
<td>Musculoskeletal Cond I</td>
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<td>P. Mintken, PT, DPT</td>
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<td></td>
<td>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.</td>
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<td>DPTR 5611</td>
<td>Patient Care Seminar I</td>
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<td>T. Struessel, PT, DPT; M. Schenkman, PT, PhD</td>
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<td>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.</td>
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<td>DPTR 5931</td>
<td>Clinical Education I</td>
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<td>J. Rodriguez, PT, MHS</td>
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<td>Four week full-time supervised clinical experience. Professional values and behaviors developed, relevant questions raised, knowledge applied, clinical skills practiced.</td>
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**SECOND YEAR, Summer Semester**

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<tr>
<td>DPTR 6002</td>
<td>Clinical Anatomy II</td>
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<td>N. Bookstein, PT, EdD; C. Johnson, PT, DPT, CHT; M. Pascoe, PhD</td>
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<td>A regional approach to 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.</td>
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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, DPT  Prereq: DPTR 5001, DPTR 5401.
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.
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  Professional Topics I: Doctoring Profession  1.0 cr.
D. Steitzner, PT, MBA  Prereq: DPTR 5002.
Exploration of professional issues including the role of the physical therapist on a healthcare team, physical therapy as a 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 growth are included.

SECOND YEAR, Fall Semester

DPTR 6205  Clin Skills: Pros/Orthos  1.0 cr.
C. Johnson, PT, DPT; C. Christiansen, PT, PhD  Prereq: DPTR 5401, DPTR 6402, DPTR 6501. Coreq: DPTR 6403, DPTR 6502.
Examination and management of patients with common upper and lower extremity amputations. 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, DPT  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.
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, PhD  Prereq: DPTR 5601.
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  Prereq: DPTR 5611.
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  1.0 cr.
J. Rodriguez, PT, MHS  Prereq: DPTR 5161.
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.
### SECOND YEAR, Spring Semester

**DPTR 6121 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 precede information regarding mechanisms of action, adverse effects, implications for exercise and other physical therapy interventions for different drug classes included.

**DPTR 6302 Medical Conditions II**  
3.0 cr.  
D. Malone, PT, PhD  
Prereq: DPTR 5111, DPTR 5301.  
Pathology and physical therapy management of individuals with oncologic, bariatric, rheumatologic, integument, 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  
Prereq: DPTR 6502.  
Principles of PT management for individuals with neurological conditions continued. Refinement of clinical decision making and therapeutic skills for pediatric conditions and individuals with disorders such as Alzheimer's and traumatic brain injury. Home, school and community participation as well as quality of life are emphasized.

**DPTR 6603 Scientific Inquiry III**  
2.0 cr.  
J. Hebert, PT, PhD  
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 Professional Topics II: Differential Diagnosis in Practice**  
2.0 cr.  
S. Jordan, PT, MA  
Prereq: DPTR 6403, DPTR 6502.  
Coreq: DPTR 6302.  
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  
Prereq: DPTR 6911.  
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  
Prereq: DPTR 6912.  
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.

### THIRD YEAR, Summer Semester

**DPTR 7112 Applied Exercise Science**  
3.0 cr.  
J. Stevens-Lapsley, 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-Lapsley, 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, DPT, PhD  
Prereq: DPTR 6702.  
Role of leaders and concepts of leadership in physical therapy and health care settings and on teams are discussed. Leadership styles and perspectives, and differences between leadership and management are explored. Resume development, mentoring, and professional development and planning are included.
Physical Therapy Program

THIRD YEAR, Fall Semester

DPTR 7131 Radiology 1.0 cr.
D. James, PT, DPT; D. Malone, PT, PhD Prereq: DPTR 6403
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 7613 Patient Care Seminar III 2.0 cr.
T. Struessel, PT, DPT Prereq: DPTR 6612.
Critical thinking and clinical decision making skill development continued and applied to patients from Clinical Education III, across the life span. Writing for publication and presentation skills also emphasized.

DPTR 7751 Health Promotion 2.0 cr.
E. Melanson, PhD; C. Figuers, PT, EdD; C. Jankowski, PhD Prereq: DPTR 7112
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 Prereq: DPTR 6932.
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.

THIRD YEAR, Spring Semester

DPTR 7934 Clinical Education IV 8.0 cr.
J. Rodriguez, PT, MHS Prereq: DPTR 7933
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 1.0-3.0 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.