ENTRY LEVEL DPT

FIRST YEAR, Summer Semester

**DPTR 5001  Clinical Anatomy I** 6.0 cr.
N. Bookstein, PT, EdD; M. Pascoe, PhD  Prereq: matriculation in entry-level Physical Therapy Program.
A regional approach to gross and microscopic anatomy of the musculoskeletal, cardiovascular, lymphatic, and nervous systems of the extremities, thorax, back, and head and neck. Includes cross sectional anatomy, radiographic and digital imaging.

**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** 2.0 cr.
D. Stelzner, PT, MBA  Introduction to a structure for analyzing patient encounters, the process of obtaining information from a general health questionnaire, patient history and systems review; followed by selecting and administering tests and measures to gather data about the patient.

**DPTR 521  Foundations of Intervention I** 2.0 cr.
Introduction to basic examination and intervention principles and techniques for posture and positioning, basic mobility with and without assistive devices, soft tissue mobilization, and physical agents, for improving functional mobility and for managing a variety of clinical problems.

FIRST YEAR, Fall Semester

**DPTR 5011  Neuroscience** 3.0 cr.
R. Gisbert, PT, DPT  This course provides a framework for understanding the structural and functional organization of the human nervous system. Principles and applications of neurophysiology, neuroanatomy and functional correlates are included. Finally, diseases and dysfunctions of the nervous system that are relevant to current practice are introduced.

**DPTR 5101  Movement Science I** 3.0 cr.
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** 2.0 cr.
L. Dannemiller, PT, DSc  This course addresses functional movement across the life span in healthy individuals. Emphasis is on stages in life when the greatest changes in motor behavior occur and the factors that influence those changes. Developmental changes in all systems and their contributions to functional movement will be explored.

**DPTR 5151  Motor Control/Learning** 2.0 cr.
W. Kriekles, PT, DPT, NCS  The foundation of motor learning and control is presented through application of current principles to activity-focused physical therapy interventions across the lifespan. 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. Emphasis on self concept, compassion, caring, honesty, suffering, and what it means to be ill.
**DPTR 5202  Examination and Evaluation II**  
D. Stelzner, PT, MBA  Prereq: DPTR 5001, DPTR 5201.  
Continuation of DPTR 5201 with reinforcement of patient-management models and use of additional tests and measures. Introduction to the use of the medical record and process of documentation.  

**DPTR 5212  Foundations of Intervention II**  
Introduction to basic examination and intervention principles and techniques of therapeutic exercise, soft tissue mobilization, and electrotherapeutic and mechanical modalities, and physical agents, for improving functional mobility and for managing a variety of clinical problems.  

**DPTR 5601  Scientific Inquiry I**  
J. Hebert, PT, PhD  
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 5621  Evidence Based Practice**  
Concepts and steps of evidence-based practice including: searching; selection; and appraisal of filtered and unfiltered literature are covered and practically applied to a variety of key clinical inquiries, including tests and measures; intervention; prognosis; cost analysis; and qualitative research, will be emphasized.  

**DPTR 5901  Integrated Clinical Experience I**  
Short-term clinical education experience providing initial foundation and understanding of clinical practice with emphasis on integration of didactic and clinical learning while working in a student team.  

**FIRST YEAR, Spring Semester**  

**DPTR 5006  Physiology**  
C. Sladek, PhD; D. Malone, PT, PhD  
Fundamentals of human physiology from basic cellular processes such as membrane support, to the organization and control of organ systems.  

**DPTR 5301  Medical Conditions I**  
D. Malone, PT, PhD  Prereq: DPTR 5111.  
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.  

**DPTR 5401  Musculoskeletal Cond I**  
P. Mintken, PT, DPT  
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 5501  Neuromuscular I**  
Frameworks for clinical decision-making are discussed regarding management of people with neurological conditions with an emphasis on people with stroke and cerebral palsy. This course teaches clinical skills for examination, evaluation, and intervention across the lifespan and across settings. Therapeutic handling is emphasized.  

**DPTR 5631  Clinical Reasoning I**  
This course guides students in identifying gaps in clinical knowledge related to examination, intervention and prognosis for a variety of patient presentations, and applying clinical reasoning approaches to critically analyze areas of uncertainty for effective and efficient clinical decision-making.  

**DPTR 5731  Healthcare Delivery I**  
Basic overview of healthcare systems will be reviewed. Focus on the Colorado Physical Therapy Practice Act, state and federal laws related to physical therapists and support personnel. The continuum of care across settings and legal aspects of physical therapist documentation will be explored.  

**SECOND YEAR, Summer Semester**  

**DPTR 6002  Clinical Anatomy II**  
N. Bookstein, PT, EdD; C. Johnson, PT, DPT, CHT; M. Pascoe, PhD  Prereq: DPTR 5001, DPTR 5101, DPTR 5011.  
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.
**SECOND YEAR, Fall Semester**

**DPTR 6205  Clin Skills: Pros/Ortho** 1.0 cr.  
C. Johnson, PT, DPT; C. Christiansen, PT, PhD  
Prereq: DPTR 5401, DPTR 6402.  
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** 2.0 cr.  
R. Gisbert, PT, DPT  
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  
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.
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 6931 Clinical Education I** 5.0 cr.
Prereq: DPT students only.
Eight-week, full-time clinical experience providing students with the opportunity to take on responsibilities of the professional physical therapist, including beginning to manage a caseload and participating in a healthcare team.

**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.

**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  Prereq: DPT students only.
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.

**DPTR 7711 Health Care Delivery** 4.0 cr.
T. Struessel, PT, DPT
Health care systems are reviewed for diverse settings. Topics include health policy and reform, insurance, coding/billing, business, human resources, case and risk management, licensure, advocacy, supervision issues and interview preparation. Also includes a comparison of the US healthcare systems and other nations.

**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 Settings** 2.0 cr.
L. Dannemiller, PT, DSc; C. Johnson, DPT; A. Nordon-Craft, PT, DSc
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, and end-of-life care. Legal issues such as Individuals with Disabilities Education Improvement Act and abuse/neglect topics will be discussed.

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<th>COURSE</th>
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<tr>
<td>DPTR 713</td>
<td>Radiology</td>
<td>1.0 cr.</td>
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<tr>
<td>D. James, PT, DPT; D. Malone, PT, PhD</td>
<td>Prereq: DPTR 6403</td>
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<tr>
<td>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.</td>
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<tr>
<td>DPTR 7613</td>
<td>Patient Care Seminar III</td>
<td>2.0 cr.</td>
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<td>T. Struessel, PT, DPT</td>
<td>Prereq: DPTR 6612</td>
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<tr>
<td>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.</td>
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<td>DPTR 7751</td>
<td>Health Promotion</td>
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<td>E. Melanson, PhD; C. Figuers, PT, EdD; C. Jankowski, PhD</td>
<td>Prereq: DPTR 7112</td>
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<td>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.</td>
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<td>DPTR 7933</td>
<td>Clinical Education III</td>
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<td>J. Rodriguez, PT, MHS</td>
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<td>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.</td>
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<td>DPTR 7934</td>
<td>Clinical Education IV</td>
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<td>J. Rodriguez, PT, MHS</td>
<td>Prereq: DPTR 7933</td>
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<td>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.</td>
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<tr>
<td>Independent Study</td>
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<td>PT Faculty</td>
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<td>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.</td>
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