YEAR 1 - Summer Term (16 Cr)

PT 7000 ANATOMY 7CR  DR PETERSON
Human anatomy of the following systems will be covered with the assistance of cadaver dissection: Cardiovascular, respiratory, endocrine/metabolic, gastrointestinal, genital & reproductive, hepatobiliary, lymphatic, renal & urologic, nervous, integumentary, and musculoskeletal. Surface anatomy, palpation, and imaging will also be incorporated.

PT 7010 MOVEMENT SCIENCE I 3 CR  DR FORD
Movement Science I introduces biomechanical principles that serve as a foundation for physical therapy. Normal and abnormal movement biomechanics will be studied especially as they pertain to gait. Integrates material from anatomy, exercise science, kinesiology, and the musculoskeletal system. Material is delivered via lecture and lab using current technology and live human subjects.

PT 7020 CARDIOVASCULAR AND PULMONARY (CVP) I 2 CR  DR SMOLIGA
This course will cover the histology and physiology of the heart, lungs, and blood vessels, including their integrated function. This course will focus on acute and chronic responses to exercise and physical activity, with an emphasis on the functional integration of multiple organ systems.

PT 7040 FOUNDATIONAL CLINICAL SKILLS 2 CR  DR KEVERN WITH DR HAMEL
This introduction to physical therapy addresses patient interview and communication (verbal and non-verbal), instilling an internal locus of control, theories of clinical decision-making, documentation, introduction to clinical examination and treatment paradigm, the WHO International Classification of Functioning, Disability and Health and the biopsychosocial model for describing and classifying function, transfer training, assistive device training, safety including universal precautions, and confidentiality.
This first in a 4 part series of courses addresses professional behaviors, ethics and values, cultural sensitivity, confidentiality, practice acts within physical therapy (PT, PTA) and other professions. Generic Abilities and the APTA’s Standards of Practice for Physical Therapy, and the importance of the APTA and professional service.

YEAR 1 - Fall Term (16 Cr)

**PT 7600 MUSCULOSKELETAL PRACTICE (MSK) I** 4 CR DR GOSS WITH DR WRIGHT
An examination and intervention paradigm is introduced and components of the musculoskeletal examination are explored. Screening, examination, evaluation, diagnosis and intervention in patients with dysfunction of the cervical spine, thoracic spine, and upper extremities. Subject matter includes chart review and patient interview, outcomes measures, appropriate screens and screening tools, motion assessment, muscle performance testing, reinforcement of palpation skills, and special tests. Evidence-based interventions will be stressed including medications for pain/inflammation, psychosocial aspects of care, manual therapy, and exercise. This course will be heavily lab-based.

**PT 7170 INTERVENTIONS I** 3 CR DR EMERSON KAVCHAK
This first in a 3 part series of courses addresses the major topics of pain science the relief of pain, local exercise, manual therapy, and nutrition in the acute stage of healing and recovery. Specific interventions include modalities (light, heat, cold, sound electrical), manual therapies (stretching, soft-tissue techniques, joint mobilization), local and early stage exercises (isometrics, activation, weightbearing, non-weightbearing, single plane, aquatic therapy), and medications for pain/inflammation (orals, injectibles, and transdermals).

**PT 7520 CVP II** 2 CR DR SMOLIGA
This course will focus on evaluating cardiopulmonary function, as well as the fundamental knowledge of cardiovascular and pulmonary function diseases within the scope of an integrated healthcare setting. An overview of standard clinical diagnostic testing methodology and clinical interpretation of each system will be included. The course also integrates components of pharmacy and exercise science. Various laboratory exercise testing procedures will be included, with an emphasis on how the underlying physiology relates to the clinical utility and interpretation of each test.

**PT 7810 CLINICAL PATHOLOGY** 2 CR DR SMOLIGA
This course is designed to provide physical therapy students an understanding of how cellular and tissue function ultimately translates to clinical practice. This course is rooted in lecture, but will regularly employ case
studies to emphasize how a strong understanding of pathophysiology is essential to optimize clinical practice. The general mechanisms of cellular injury, death, disease, adaptation, repair, and aging in response to various stimuli are covered. In addition to these general principles, the course covers the pathophysiology of selected diseases most likely to be encountered by entry-level physical therapists. Through understanding the broad principles and specific examples covered in this course, students will be equipped with foundational knowledge necessary for interdisciplinary healthcare practice. By the conclusion of the course, students will be able to apply general principles of pathophysiology to clinical situations to optimize diagnosis, management, and prevention of injuries and disease. As such, students are expected to utilize their knowledge of pathophysiology to enhance their clinical reasoning skills.

PT 7510 MOVEMENT SCIENCE II 3 CR  DR FORD
Movement Science II is a research-based experience in the mechanical, neuromuscular, and anatomical bases of human movement. The purpose of the course is to expand the prerequisite knowledge in basic biomechanics and apply it to investigate fundamental human movements such as walking, running, jumping, reaching and throwing. Students will also be introduced to current techniques of biomechanical analysis including the use of high-speed videography, ground reaction force analysis, and electromyography. Material is delivered via lecture and lab using current technology and live human subjects.

PT 7280 EVIDENCE-BASED PRACTICE (EBP) I 2 CR  DR TAYLOR
The first course in the EBP sequence will focus on the basics of acquiring and appraising research related to physical therapy practice so that the student can become a critical consumer of the Physical Therapy scientific literature. Specific topics will include accessing and critiquing scholarly literature, the scientific method, and experimental study designs.

YEAR 1 - Spring Term (14 Cr)

PT 7610 MSK II 4 CR  DR WRIGHT WITH DR GOSS
An examination and intervention paradigm is reinforced and components of the musculoskeletal examination are explored. Screening, examination, evaluation, diagnosis and intervention in patients with dysfunction of the lumbosacral spine, and lower extremities. Subject matter includes chart review and patient interview, outcomes measures,
appropriate screens and screening tools, motion assessment, muscle performance testing, and reinforcement of palpation skills, manual therapy, exercise, and special tests. This course will be heavily lab based.

PT 7680 EBP II  2 CR  DR TAYLOR

The second course in the Evidence-Based Practice sequence will further expand the students analytical skills by focusing on quantitative data analysis, including basic statistical procedures, measurement properties (i.e. reliability and validity), and experimental methodology as it relates to research in the field of physical therapy. The second half of the course will be devoted to the use of outcome measures in physical therapy practice across the continuum of care.

PT 7380 NEUROSCIENCE  4 CR  DR PETERSON

This course will include the major topics of neuroanatomy, neurophysiology, and neuropathology.

PT 7050 CLINIC I  2 CR  DR KEVERN

Students are assigned to a clinical facility for half of a day throughout a 7-week clinical education experience. This course will provide students with exposure to clinical settings, interactions with patients, and mentorship from a licensed clinician. Students will focus on examination, evaluation, history taking, interventions and professional behavior.

PT 8400 SELECTIVE I  2 CR  DR DISCHIAVI  OTHER FACULTY TO BE DETERMINED

Students will have the opportunity to learn more about specialty areas in physical therapy.

Sports I

Through the utilization of the elements of the physical therapist patient/client management model (examination, evaluation, diagnosis, prognosis, and intervention) students will apply clinical skills, strategies and decision making for the management of the athlete. Students will identify appropriate and relevant tests, assessments, evaluation and interventions to be used with athletes who exhibit functional limitations. Students will also develop comprehensive plans of care for athletes with a specific focus on return to play scenarios.

YEAR 2- Summer (14 cr)

PT 8020 CVP III  2 CR  DR SMOLIGA WITH DRS TEPPER AND HUMPHREY

Students will learn the examination, evaluation, and treatment of patients whose impairments, functional limitations, and disabilities are the result of pathologies of the cardiovascular and pulmonary systems.

PT 7590 PROFESSIONALISM AND LEADERSHIP II  2CR  DR KEVERN
This second in a 4 part series of courses is focused on practice management. The course addresses styles of leadership, ethics and morals in leadership, innovation and entrepreneurship, management, and billing practices in practice including but not limited to inpatient, outpatient, worker’s compensation, and home health.

**PT 8080 EBP III 2 CR DR TAYLOR**
The last course in the EBP sequence will focus on critiquing current literature and applying and integrating evidence into physical therapy practice. This course sequence will culminate with students completing a team-based independent research project synthesizing current literature in the field, and formulating a relevant systematic review.

**PT 8380 ADULT NEURO REHAB 4 CR DR HAMEL**
Management of adults with complex central nervous system (CNS), multisystem disorders and peripheral nervous system (PNS) and neuromuscular disease, will be presented. Neuropathology, clinical presentation, examination, evaluation, diagnosis, prognosis, and intervention will be stressed. The role of the physical therapist will be addressed across treatment environments and across the time course or progression of the disease: acute through chronic as appropriate. Class discussion of contemporary research and evidence-based clinical practice will be used to focus students attention on the undergirding principles of neurorehabilitation and their practical application. Under the direction of a licensed physical therapist, students will be required to participate in the Department of Physical Therapy pro bono clinic.

**PT 7770 INTERVENTIONS II 3 CR DR EMERSON KAVCHAK**
This second in a 3 part series of courses addresses the major topics of Motor Control Theory, a regional exercise approach (eccentrics, isokinetics, multi-joint exercises, multiplanar resistance, motor control, unweighting treadmills), nutrition (balanced nutrition for health & healing), and manipulation.

**PT 7060 COMMUNITY OUTREACH 1 CR DR EMERSON KAVCHAK**
In this first of a series of 3 courses, students will participate in mentored practice in the pro bono clinic serving the underserved, perform community service, and perform educational outreach.
PT 8385 PEDIATRICS  4 CR  DR GOSSELIN with DR HAMEL
This course will focus on the normal and abnormal developmental changes of children birth through 21 years of age. The management of common central and peripheral neurologic diseases, neuromuscular and musculoskeletal pediatric conditions will be emphasized. Pathology, genetics, clinical presentation, examination, evaluation, physical therapy diagnosis, prognosis, and intervention will be stressed. Class discussion of contemporary research and evidence-based clinical practice will be used to focus students attention on the undergirding principles of neurorehabilitation and musculoskeletal interventions and their practical application.

PT 8075 ORTHOTICS & PROSTHETICS  1 CR  DR GOSS
This course is designed to provide students with opportunities to develop, integrate, and apply knowledge and skills necessary to examine and treat individuals with selected musculoskeletal conditions. Topics include management of clients with a prosthesis or orthotic. The laboratory sessions are designed to provide students with opportunities to apply examination and treatment techniques used in the management of clients with a prosthesis or orthotic.

PT 7560 COMMUNITY OUTREACH II  2 CR  DR EMERSON KAVCHAK
In this second in a series of 3 courses, students will participate in mentored practice in the pro bono clinic serving the underserved, perform community service, and perform educational outreach. In this course, students should be gaining increased comfort with examination, evaluation and treatment as well as documentation of client encounters in a primary care setting.

PT 7550 CLINIC II  2 CR  DR KEVERN
Students will be assigned to a clinical facility for half a day throughout a 7-week clinical education experience in a setting different than Clinic I. This course provides students with exposure to clinical settings, patient interactions, and mentorship from a licensed clinician. Students will focus on examination, evaluation, history taking, interventions and professional behaviors.

PT 8410 SELECTIVE II  2 CR  DR DISCHIAVI  OTHER FACULTY TO BE DETERMINED
Students will have the opportunity to learn more about specialty areas in physical therapy.

Sports II
Theories and research related specifically to sports medicine and the complex demands placed on the athlete as a global system are explored. A case study format will be used to integrate comprehensive treatment planning and development of advanced strategies in therapeutic exercise to address the needs of the athlete in various settings.

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<th>YEAR 2- Spring (14 cr)</th>
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<tr>
<td><strong>PT 8070 INTERVENTIONS III</strong> 3 CR  DR EMERSON KAVCHAK</td>
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<td>This third in a 3 part series of courses addresses the major topics of global exercise, return to function, wellness, prevention, and nutrition in high performance individuals. Specific topics to address are cardiovascular exercise (bikes, treadmills, upper extremity ergometers, stair climbers), plyometrics and high-speed exercise, Olympic-style lifting, performance enhancement, wellness, prevention, and nutrition demands in competitive individuals.</td>
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<td><strong>PT 8160 PRIMARY CARE 4 CR  DR GOSS</strong></td>
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<td>This course will address necessary skills of the physical therapist as a primary care provider including screening and referral and imaging. The new UK standards on preparing PTs to prescribe medications will also be addressed and students will become first responder certified. CPR, triage, life support, and emergency response will be stressed as well as clinical decision-making and interprofessional relations.</td>
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<td><strong>PT 8490 MEDICALLY COMPLEX PATIENTS 4 CR  DR HAMEL</strong></td>
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<td>This course is designed to coalesce the students’ learning of the major body systems (Integumentary, musculoskeletal, neuromuscular, and cardiovascular &amp; pulmonary) and foundational knowledge in the context of older and/or sicker patients that may be encountered in acute care and other practice settings. Polypharmacy and it’s negative side affects will be covered. This course will take advantage of case studies, practice opportunities, and lecture.</td>
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<tr>
<td><strong>PT 8060 COMMUNITY OUTREACH III 2 CR  DR EMERSON KAVCHAK</strong></td>
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<tr>
<td>In this third in a series of 3 courses, students will participate in mentored practice in the pro bono clinic serving the underserved, perform community service, and perform educational outreach. In this course, students should achieve competence with examination, evaluation and treatment as well as documentation of client encounters in a primary care setting.</td>
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PT 7690 INTERDISCIPLINARY CARE   1 CR   DR KEVERN
This course is designed to help the students understand the roles of various health professions. During the course of their careers, PTs will interact with many technicians, therapists, medical practitioners, mid-level providers and technologists all of whom have important roles to play in the care of patients. In this course, students will have direct interaction with students and faculty from other health professions. They will discuss roles and review perceptions of important health care issues. The initial focus of this course will be the analysis of peer-reviewed journal articles that have a wide range of interest across medical specialties and health care fields.

YEAR 3- Summer (12 cr)

PT 8110 INTEGUMENTARY AND SPECIALTY PRACTICE   4 CR   DR GOSSelin
This course will address the vital functions of the integument, its diagnosis, examination, evaluation, and treatment. Common pathologies of the integument will be studied as well as the integument as a window to suspecting other pathologies like DVT and pathologies like skin cancer that require referral. In addition, specialty practice areas of physical therapy will be explored including but not limited to oncology, rheumatology, and men's and women's health.

PT 8610 CLINICAL REASONING   2 CR   DR HEGEDUS
This class will use a case study format to focus on unique and rare pathologies, clinical findings, and clinical presentations, which are designed to further the students' clinical reasoning skills.

PT 8090 PROFESSIONALISM & LEADERSHIP III   1 CR   DR ERIC HEGEDUS and DR FRANK LAYMAN
This third in a 4 course series aims to give students additional skill sets that add value to the clinical practice in which they work. This course will specifically address leading clinical quality enhancement/quality improvement initiatives, understanding of teaching and learning styles in the Clinical Instructor role, and professional service through government advocacy.

PT 8050 CLINIC III   2 CR   DR KEVERN
The class will be split in two with half going out on full day clinical affiliations for 7 weeks and the other ½ taking classes. The 2 halves will then switch. Students will be assigned to a clinical facility for a 7-week, full-time clinical education experience. As a full-time experience, students will be expected to independently examine, evaluate, and treat patients with a variety of diagnoses.
PT 8420 SELECTIVE III  2 CR  DR DISCHIAVI  and  OTHER FACULTY TO BE DETERMINED
Sports III
Provides students with an integrated rehabilitative approach with a deliberate focus on learning how the neurologic system works in concert with the orthopedic system to achieve efficient human movement. Systems will include neurophysiological theories of motor control, balance, neurocognitive applications, and vestibulo-ocular control. A sports medicine philosophy will be applied to various types of orthopedic dysfunctions, integrating a multi-system approach to rehabilitation.

YEAR 3- Fall (11 cr)
PT 8900 CLINICAL INTERNSHIP I  9 CR  DR KEVERN
Students will be assigned to a clinical facility for a 12-week, full-time clinical education experience. This course provides students with the opportunity to apply their didactic knowledge to the clinical setting, while continuing to refine their professional behaviors. Students are expected to be able to independently care for a full caseload at the end of the experience as an entry-level clinical provider.
PT 8590 PROFESSIONALISM & LEADERSHIP IV  2 CR  DR TAYLOR
Students must take and pass a mock board examination. Students also will learn of the necessary processes for taking the board examination and undergoing the process of licensing. Other topics to include readiness to find employment (resume preparation, interview, negotiations), and an introduction to residencies and fellowships in physical therapy.

YEAR 3- Spring (9 cr)
PT 8910 CLINICAL INTERNSHIP II  9 CR  DR KEVERN
Students are assigned to a clinical facility for a 12-week, full-time clinical education experience. This course provides students with the opportunity to apply their didactic knowledge to the clinical setting, while continuing to refine their professional behaviors. Students are expected to be able to independently care for a full caseload at the end of the experience as an entry-level clinical provider.