Courses

**PTOT 5501 Clinical Kinesiology and Biomechanics: 4 semester hours.**
Analysis of normal and pathological human movement in joints, posture, gait, and the vertebral column. Application of movements to therapeutic interventions is emphasized. PREREQ: Graduate student; progression in the DPT program.

**PTOT 5502 Clinical Neuroscience: 5 semester hours.**
Study of structure and function of the human nervous system at the cellular and systemic levels. Specific application to clinical management of neurological problems and pathology. PREREQ: Graduate student; progression in the DPT program.

**PTOT 5503 Fieldwork Seminar: 1 semester hour.**
Individual or group in the process and procedures of acquiring placement in fieldwork rotations in the MOT program. Will be repeated. Graded S/U. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5504 Generic Abilities: 1 semester hour.**
Individual and/or group discussion, self-assessment, goal setting and portfolio development related to developing and maintaining professional behaviors in occupational therapy practice. PREREQ: None. Will be repeated. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5505 Occupational Therapy Clinical Procedures: 2 semester hours.**
Students learn about occupational therapy assessment and treatment. They engage in hands-on experiences involving the theory and application of basic techniques of patient evaluation and handling.

**PTOT 5506 Analysis of Human Movement Through Activity: 4 semester hours.**
Analysis of normal and pathological movement of the human body. Joint biomechanics, kinesiology, arthrokinematics, and osteokinematics as applied to functional activities. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus. PREREQ: Enrollment in MOT program.

**PTOT 5507 Professional Behaviors Seminar: 1 semester hour.**
Students engage in and exemplify professional behaviors in preparation for their clinical practicum experience and clinical fieldwork rotations. This course focuses on self-reflection on individual student’s professional behaviors, establishing short-term professional development plans, tracking development of and changes in one’s professional behaviors, and documenting progress. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5512 Professional Communication: 2 semester hours.**
Introduction to standard forms of professional communication in physical and occupational therapy and among other health care professions. Medical record-keeping and interdisciplinary communication are emphasized. PREREQ: Graduate student; progression in the DPT or OPT program.

**PTOT 5513 Occupational Therapy Profession: 3 semester hours.**
Students learn a historical and theoretical overview of the occupational therapy profession and examine the roles occupational therapists play in health care, educational, and psychosocial settings. Students examine the occupational therapy process and collaborative roles played in rural and urban service delivery systems, and review the future direction of the profession, professionalism, and ethical, legal, and political issues.

**PTOT 5514 Research Methodology: 3 semester hours.**
Application of principles of research design in the biological, psychological and social sciences. Clinical and laboratory research in occupational and physical therapy are emphasized. Preparation for professional project. PREREQ: Graduate student; progression in the DPT or MOT program.

**PTOT 5515 Service Delivery of Occupational Therapy: 3 semester hours.**
Students acquire the knowledge, skills, and professional behaviors needed to develop, organize, implement, manage, and evaluate relevant therapy programs, using a business model and/or grant-sponsored endeavor. Students explore and learn about policies related to reimbursement.

**PTOT 5519 Practicum: 1 semester hour.**
Application of various aspects of critical thinking skills to client assessment and intervention. Reflection on and development of personal approaches to patient care. COREQ: PTOT 5533.

**PTOT 5521 Self-Exploration in Occupation: 3 semester hours.**
Students learn basic principles of occupational science, foundational to understanding the role of human occupation in health and participation in life and an intuitive understanding of these processes. It engages students in both the in-depth study of occupation and active participation in occupation, while requiring deep reflection and peer discussion to integrate these two components. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5522 Occupational Performance: 3 semester hours.**
Students explore the role of occupation in health/well-being. They study the Occupational Therapy Practice Framework to understand the OT process. Students examine occupational performance and its variables. Students learn about frames of reference and theories to help organize, assess, and interpret occupational performance for individuals and populations. Learn to analyze occupational performance through a systemized approach to activity analysis. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5523 Therapeutic Use of Self in Occupation: 2 semester hours.**
Students learn the historical and philosophical perspectives of the therapeutic relationship, through lectures, group activities, reflective exercises, a review of phenomenological literature, and role playing. Student learn to develop and implement therapeutic relationships that support and enhance client occupational performance.

**PTOT 5524 Physical Function in Occupation Performance: 4 semester hours.**
Students learn the theory and application of occupational performance and function within the context of adult clients with physical dysfunction. Students learn about physical and psychosocial dysfunction in rehabilitation and orthopedic management.

**PTOT 5525 Psychosocial Function in Occupation: 4 semester hours.**
Students examine mental health conditions, culture, socioeconomic status and other factors related to psychosocial dysfunction. Students explore, learn, and critically analyze occupational therapy theories, frames of reference, assessment and measurement tools, and intervention strategies used to identify and address occupational performance problems, related to psychosocial dysfunction and the mental health settings in which they are used.
**PTOT 5526 Neurological Function in Occupation: 5 semester hours.**
Students learn theory and frames of reference related to persons with neurological disorders or injury, through the study of evaluation, treatment, and long-term management of neurological factors that may cause disability. Students learn about occupational problems related to neurological dysfunction found in specific conditions, such as spinal cord injury, head injury, cerebral vascular accidents, and Parkinson’s disease. This course addresses physical, cognitive and other factors related to neurological dysfunction.

**PTOT 5527 Occupation and Environmental Management: 3 semester hours.**
Students explore ways in which occupational therapists in a variety of settings can support health and participation in life through engagement in occupation, by acknowledging and managing the multiple contexts surrounding their clients. Explore models of service provision for both

**PTOT 5528 Occupation with Children and Adolescents: 4 semester hours.**
Students learn common conditions, impairments, and disabilities in children, how they affect development and occupational performance, the pediatric evaluations used to assess these conditions, and interventions used to address occupational performance problems. Students

**PTOT 5531 Clinical Affiliation I-Fieldwork I: 1 semester hour.**
Fieldwork opportunities to observe occupational performance of persons served by local institutional or community-based health, educational, and human service organizations. Graded S/U. PREREQ: PTOT 5522 and PTOT 5542.

**PTOT 5532 Clinical Affiliation II-Fieldwork I: 1 semester hour.**
Students participate in a clinical, practical, occupational therapy experience, in the on-campus Disability Student Services Center, under the direction and supervision of the occupational therapy faculty members. They follow a student/client of the DSSC throughout the semester. Emphasis is on hands-on experience with documentation, evaluation, clinical reasoning, and treatment planning with a student client of ISU’s Disability Student Services Center.

**PTOT 5533 Clinical Affiliation III-Fieldwork II: 7 semester hours.**
An in-depth clinical affiliation with clients having physical, psychosocial, neurological, and/or multisystem impairments/disabilities in a facility-based setting such as a hospital or rehabilitation center. Graded S/U: PREREQ: PTOT 5532.

**PTOT 5534 Clinical Fieldwork IV (Level II): 7 semester hours.**

**PTOT 5542 Occupational Performance Laboratory: 1 semester hour.**
Students apply concepts, models, and frames of reference learned in PTOT 4422/5522, to analyze tasks and the occupational performance of individuals and populations. Students administer occupational performance evaluations and develop competence in completing occupational profiles and analyses of occupational performance, as it relates to self-care, work, and leisure. This lab serves as a precursor to developing occupational therapy intervention plans for individuals/populations with or at risk for disability.

**PTOT 5544 Physical Function in Occupation Laboratory: 1 semester hour.**
During these laboratory sessions, students apply hands-on evaluation and treatment techniques used in the physical and psychosocial occupational performance approach, that they learned about in the Physical Function in Occupation class.

**PTOT 5545 Psychosocial Function in Occupation Laboratory: 1 semester hour.**
Students participate in laboratory exercises in which they apply occupational therapy theories and frames of reference to the evaluation and treatment of persons with psychosocial dysfunction or disability. Students learn about the administration and interpretation of major assessment instruments, treatment plan development and implementation, documentation, and client/caregiver education.

**PTOT 5546 Neurological Function in Occupation Laboratory: 1 semester hour.**
During these laboratory sessions, and assignments, students are exposed to and participate in evaluation and treatment techniques that address the physical, cognitive and other factors related to neurological dysfunction, applying what they learn in PTOT 5526.

**PTOT 5547 Occupation and Environmental Management Laboratory: 1 semester hour.**
During these laboratory sessions, and assignments, students are exposed to and participate in simulated and real-world treatment opportunities. The laboratory experiences provide students with practice in adapting the environment to support their clients’ health and participation in life through engagement in occupation, with specific focus on ergonomics, assistive technology, community wellness, low-vision rehabilitation, home/community accessibility, and the unique environmental aspects of rural life and the special needs of farmers and ranchers.

**PTOT 5548 Occupation with Children and Adolescents Laboratory: 1 semester hour.**
During these laboratory sessions, and assignments, students apply what they learn in PTOT 5528 regarding pediatric and adolescent screenings, evaluations, and interventions for children and adolescents with disabling condition.

**PTOT 5571 Professional Issues in Occupational Therapy Practice: 1 semester hour.**
Students participate in an in-depth exploration of a topic related to the practice of occupational therapy and apply principles of instructional design to share the topic with their peers. Topics explored may include evidence-based practice, managing ethical dilemmas, program development, and advocacy.

**PTOT 5581 Fieldwork Seminar I: Introduction to Fieldwork: 1 semester hour.**
Students learn about the basics of fieldwork in this course, in the first in series of 4 fieldwork seminar courses. Students are introduced to information they will need to choose and successfully complete fieldwork, including the purpose of fieldwork, the roles of the key players, and the basic required fieldwork documentation. Students area also introduced to the process of making their Level II fieldwork requests, which they complete by the end of the semester. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5582 Fieldwork Seminar II: Transition from Level I Fieldwork: 1 semester hour.**
Students reflect on their Level I fieldwork experiences and explore factors that will make them more successful in their future Level I and Level II fieldwork placements in this, the second courses in the student’s series of four Fieldwork Seminar courses.

**PTOT 5583 Fieldwork Seminar III: Preparing for Level II Fieldwork: 1 semester hour.**
Students actively engage in tasks to prepare them for their first Level II fieldwork experience, including, preparing their fieldwork objective and communicating with their fieldwork educator, in this, the third in the a series of four fieldwork seminar courses. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.

**PTOT 5584 Fieldwork Seminar IV: Becoming a Self-Reflective Fieldwork Student: 1 semester hour.**
Students finalize their preparation for their final Level II fieldwork experience and learn strategies to navigate the transition from student to entry level clinician in this, the fourth and final fieldwork seminar course. An emphasis is put on students becoming self-reflective in their role as fieldwork students and future self-reflective practitioners. Specific, evaluated graduate-level activities and/or performances are identified in the course syllabus.
Physical/Occupational Therapy (PTOT)  

PTOT 5591 Occupational Therapy Professional Project 1: 1 semester hour.  
Students begin work with their research groups, in consultation with a faculty member project advisor. This may also include initial work on preparing their Institutional Research Board/Human Subjects Committee proposal for eventual submission to the IRB/HSC. The completion of the series of 4 research courses will culminate in a public presentation of a posted and a publishable paper in conjunction with their faculty member project advisor. Graded S/U.

PTOT 5592 Occupational Therapy Professional Project 2: 1 semester hour.  
Students continue to work with their research groups, in consultation with a faculty member project advisor, and prepare their Institutional Research Board/Human Subjects Committee proposal for submission to the IRB/HSC. Following approval by the IRB, student groups will prepare their surveys for distribution, prepare other methods of data collection, recruit research participants using approved methods, and/or collect research data. The completion of this series of 4 research courses, will culminate in a public presentation of a poster and a publishable paper in conjunction with their faculty member project advisor. Graded S/U.

PTOT 5593 Occupational Therapy Professional Project 3: 1 semester hour.  
Students continue to work with their research groups, in consultation with their faculty member project advisor. Together, they analyze their data, prepare a draft of a paper, using their analyzed data, accompanied by their literature review introduction, purpose, and methods and materials, that they have previously created. They will add their newly created results, discussion, and conclusion, and prepare a draft poster for presentation. Students submit an RFP and presentation of their poster to a state, regional, or national conference, in conjunction with their faculty member project advisors. Graded S/U.

PTOT 5594 Occupational Therapy Professional Project 4: 2 semester hours.  
Students continue to work with their research groups, in consultation with their faculty member project advisors. Together they prepare a final version of their poster for presentation at a state, regional, or national conference, in conjunction with their faculty member project advisors, and at the Occupational Therapy Program’s research colloquium, and/or other related event, and a final version of their paper, in preparation to submit it for publication, in conjunction with their faculty member project advisors. Graded S/U.

PTOT 5599 Experimental Course: 1-6 semester hours.  
The content of this course is not described in the catalog. Title and number of credits are announced in the Class Schedule. Experimental courses may be offered no more than three times with the same title and content. May be repeated.

PTOT 6606 Clinical Therapeutic Exercise: 3 semester hours.  
Theoretical and evidence-based application of exercise for various pathological conditions. Aerobic conditioning, muscular strengthening, flexibility, balance, coordination, power and agility are discussed, demonstrated and evaluated. Specific exercise prescription, modes of exercise, and application for desired outcomes are emphasized. PREREQ: Graduate student; progression in the DPT program.

Study of the major drug groups, therapeutic implication and side effects for drugs commonly used for musculoskeletal disorders. PREREQ: Graduate student; progression in the DPT or MOT program; or by course instructor permission.

PTOT 6609 Applied Pharmacology - Cardiopulmonary Emphasis: 1 semester hour.  
Study of the major drug groups, therapeutic implication and side effects for drugs commonly used for cardiopulmonary system disorders. PREREQ: Graduate student; progression in the DPT or MOT program; or by course instructor permission.

Study of the major drug groups, therapeutic implication and side effects for drugs commonly used for neurological system disorders. PREREQ: Graduate student; progression in the DPT or MOT program; or by course instructor permission.

PTOT 6614 Physical Therapy Fundamentals: 2 semester hours.  
The introduction and practice of basic knowledge and skills needed for physical therapy practice and management. PREREQ: Graduate student; acceptance in the DPT Program.

PTOT 6615 DPT Capstone Project: 1-2 semester hours.  
This is a three phase, progressive series of courses. Capstone Phase 1 (1 credit) requires the study and write up of a clinical pathology. Capstone Phase 2 (2 credit) presents case report design process education, healthcare advocacy, and legal professional concerns. Capstone Phase 3 (2 credits) includes national board examination preparation, case report development requiring the in-depth study, development, reporting and presentation of a comprehensive patient case with an emphasis on the clinical reasoning and decision-making related to the entire patient care process.

PTOT 6616 MOT Professional Project: 1-2 semester hours.  
In-depth study of treatment, administrative, or education problem in occupational therapy. Preparation and public presentation of a publishable product is required. May be repeated for up to 6 credits. A minimum of 4 credits is required. Graded S/U. PREREQ: PTOT 5514.

PTOT 6617 Research Practicum: 1-2 semester hours.  
Faculty supervised clinical, basic or applied research project which may include review of literature preparation, proposal development, data collection, and manuscript preparation. May be repeated up to 4 credits. Graded S/U. PREREQ: Graduate student; progression in the DPT program.

PTOT 6618 Practicum I: 1-2 semester hours.  
Supervised clinical experience in physical therapy. May be repeated up to 4 credits. Graded S/U. PREREQ: Graduate student, progression in the DPT program.

PTOT 6619 Practicum II: 1-2 semester hours.  
Supervised clinical experience in physical therapy. May be repeated up to 4 credits. Graded S/U. PREREQ: Graduate student, progression in the DPT program.

PTOT 6620 Clinical Procedures: 3 semester hours.  
Study and practice of theory and application of basic techniques of patient evaluation, handling, and treatment in physical therapy. PREREQ: Graduate student, progression in the DPT program.

PTOT 6621 Musculoskeletal System Management 1 (upper extremity): 3 semester hours.  
Orthopedic and manual physical therapy evaluation, treatment, and management of upper extremity conditions including muscle, skeletal, and connective tissue pathologies. Lab/Lecture course with video and web supplementation.

PTOT 6622 Musculoskeletal System Management 2 (lower extremity): 3 semester hours.  
Orthopedic and manual physical therapy evaluation, treatment, and management of lower extremity conditions including muscle, skeletal, and connective tissue pathologies. Lab/Lecture course with video and web supplementation.

PTOT 6623 Biophysical Agents Theory and Application: 3 semester hours.  
Study of theory and therapeutic uses of biophysical agents with practice of application designed to develop clinical competence in the use of biophysical agents in the treatment of patients with specific pathologies and conditions.
PTOT 6624 Cardiac and Pulmonary Systems Management: 3 semester hours.
Physical therapy evaluation and management of persons with dysfunction of the cardiac and/or pulmonary systems and related pathologies. Principles and workings of acute care settings in physical therapy. Management by other health professional team members. PREREQ: Graduate student, progression in the DPT program.

PTOT 6625 Cardiac and Pulmonary System Management II: 2 semester hours.
Physical therapy management of persons with increased criticality of dysfunction of the cardiac and/or pulmonary systems and related pathologies. Emphasis on pulmonary systems and interaction with other body systems. PREREQ: Graduate student, progression in the DPT program.

PTOT 6626 Neurological Systems Management: 2 semester hours.
Physical therapy management of patients with central and peripheral neural and neuromuscular dysfunctions from traumatic causes. PREREQ: Graduate student, progression in the DPT program.

PTOT 6628 Integumentary and Lymphatic Conditions: 2 semester hours.
PTOT 6628 Integumentary and Lymphatic Conditions: 2 Semester hours.

PTOT 6631 Clinical Affiliation I: 5 semester hours.
Clinical management practicum related to orthopedics, general medicine, and/or cardiopulmonary problems in a variety of clinical settings. Graded S/U. PREREQ: Graduate student; progression in the DPT program.

PTOT 6632 Clinical Affiliation II: 5 semester hours.
Clinical management practicum related to patients with orthopedic, neurological and multisystem problems. Graded S/U. PREREQ: Graduate student; progression in the DPT program.

PTOT 6642 Musculoskeletal System Management I (spine): 3 semester hours.
Orthopedic and manual physical therapy evaluation, treatment, and management of spinal conditions including muscle, skeletal, and connective tissue pathologies. Lab/Lecture course with video and web supplementation.

PTOT 6646 Neurological Systems Management Lab: 3 semester hours.
Physical therapy management of patients with central and peripheral neural and neuromuscular dysfunctions from acquired neurological conditions. PREREQ: Graduate student, progression in the DPT program.

PTOT 6648 Graduate Special Topics: 1-3 semester hours.
Individual or group critical analysis and study of a specific area of physical therapy patient management, administration, or research. May be repeated. PREREQ: 2nd year students and/or permission of instructor.

PTOT 6650 Diagnostic Imaging for Rehabilitation Professionals: 1 semester hour.
This course will introduce the rehabilitation to the basics of medical diagnostic imaging. Students will learn the basic production, evaluation, and integration of medical imaging. The focus of the course is on the understanding the standard x-ray film series for the spine and extremity joints, with specific applications of bone scans and MRI. It employs a systematic, practical approach and calls for class participation in the analysis of some films. Lecture course with video and web supplementation. PREREQ: graduate student, progression in the DPT program or permission of instructor.

PTOT 6699 Experimental Case: 1-6 semester hours.
The content of this course is not described in the catalog. Title and number of credits are announced in the Class Schedule. Experimental courses may be offered no more than three times with the same title and content. May be repeated.

Study of the major drug groups, therapeutic implication and side effects for drugs commonly used for mental health and lifespan considerations. PREREQ: Graduate student; progression in the DPT or MOT program; or by course instructor permission.

PTOT 7713 Physical Therapy Professions: 1 semester hour.
Survey of current status of the physical therapy profession in health care systems. Professionalism, ethics, legal issues, validation of practice, future projections and historical perspective. PREREQ: Graduate student; acceptance in the DPT Program

PTOT 7715 Physical Therapy Resource Management: 3 semester hours.
Application of business and health care administration principles to the practice of physical therapy resource management strategies with an emphasis on community service delivery. PREREQ: Graduate student; progression in the DPT program.

PTOT 7725 Multi-Systems Management: 4 semester hours.
Physical therapy management of persons with problems affecting multiple systems; burns, wounds, amputations, neoplasms, metabolic disorders. PREREQ: Graduate student; progression in the DPT program.

PTOT 7727 Geriatric Management: 3 semester hours.
Examination, evaluation and treatment of the elderly population with emphasis on the management of normal and pathological conditions. PREREQ: Graduate student; progression in the DPT program.

PTOT 7728 Lifespan Development: 3 semester hours.
Normal and abnormal development of neuromuscular, musculoskeletal, cardiopulmonary systems cognitive/perceptual and psychosocial behavior associated with life through adolescence. Evaluation, program planning and treatment strategies are introduced. PREREQ: Progression and full enrollment in the DPT program.

PTOT 7731 Clinical Affiliation III: 5 semester hours.
Clinical management practicum related to patients with orthopedic, neurological, and multisystem problems. PREREQ: Graduate student; progression in the DPT program.

PTOT 7733 Clinical Affiliation IV: 5 semester hours.
Clinical management practicum related to patients with orthopedic, neurological, and multisystem problems. Prereq: Graduate student; progression in the DPT program.

PTOT 7734 Clinical Affiliation V: 5 semester hours.
Clinical management practicum related to patients with orthopedic, neurological, cardiopulmonary, and multisystem problems leading to entry-level competency. Graded S/U. PREREQ: Graduate student; progression in the DPT program.

PTOT 7735 Clinical Externship: 5 semester hours.
Clinical management experiences related to patient care, administration, or research in a variety of practice environments. Graded S/U. PREREQ: Graduate student; progression in the DPT program.