Physical Therapy

K. Gibson, Chair
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https://healthprofessions.missouri.edu/physical-therapy/

Physical Therapy involves the evaluation and treatment of physical disability and pain that may result from injury, disease or developmental disability. Prevention of disability and public education are also roles of the physical therapist. Physical therapists use tests and measurements to assess body system dysfunction and determine diagnosis and treatment. Daily living skills, including work, are also addressed.

Faculty

Emeritus Professor M. Brown*, M. A. Minor*
Teaching Professor T. Briedwell*, K. Gibson*
Clinical Professor C. C. Abbott*
Associate Professor E. A. Dannecker**, T. M. Guess**, S. P. Sayers**
Associate Teaching Professor D.E. Martin*, E. Prost*, K. Stephens*
Associate Clinical Professor M. S. Hargrove*
Assistant Professor J. Craggs*
Assistant Teaching Professor R. Bliss*, C. Blow*, J. Bridges*, A. Campbell*, J. Hall*, B. Willis*

* Graduate Faculty Member - membership is required to teach graduate-level courses, chair master's thesis committees, and serve on doctoral examination and dissertation committees.
** Doctoral Faculty Member - membership is required to chair doctoral examination or dissertation committees. Graduate faculty membership is a prerequisite for Doctoral faculty membership.

Undergraduate

• BHS in Pre-Professional Physical Therapy (http://catalog.missouri.edu/undergraduategraduate/schoolofhealthprofessions/physicaltherapy/bhs-pre-prof-phys-therapy/)

Graduate

The Department of Physical Therapy does not offer any graduate-level degrees. We do offer Doctor of Physical Therapy at the professional level. Please see the Professional Physical Therapy section (http://catalog.missouri.edu/professional/physicaltherapy/dpt-physical-therapy/) in the catalog for more information.

PH_THR 1000: Introduction to Physical Therapy
Acquaints students with the physical therapy profession including the required educational preparation, practice settings, sample interventions, current issues, trends and research. Graded on S/U basis only.

Credit Hour: 1

PH_THR 4250: Human Kinesiology
(same as HTH_PR 4250). Study of principles of physical laws, biomechanics and anatomic structure relative to human movement.

Applications through analysis of daily functional performance, exercise, and sport.

Credit Hours: 3
Prerequisites: PTH_AS 2201

PH_THR 4420: Foundations of Therapeutic Exercise
Physiological basis of exercise throughout the lifespan with emphasis on the musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary systems and the effects of injury and disease on these systems.

Credit Hours: 3

PH_THR 5100: Introduction to Interprofessional Practice
(same as OC_THR 5100; cross-leveled with HTH_PR 7100, HTH_PR 4100). This course serves as a foundation and introduction to interprofessional education and collaboration. Students who enroll in this course will be assigned to mini-teams of students from a range of disciplines. Through this course, students will develop an understanding of their own unique role as a healthcare provider and the importance of client- and community-centered care and effective teamwork, as well as communication skills.

Credit Hour: 1

PH_THR 5110: Fundamentals of Physical Therapy
Introduction to professional school and expectations, history of physical therapy; the profession, basic skills, first aid, infection control, vital signs, surface anatomy.

Credit Hour: 1

PH_THR 5200: Problems in Physical Therapy
Organized study of selected content/topics in physical therapy, health and wellness, prevention of disease and disability, and the rehabilitation sciences. Specific content may vary from semester to semester.

Credit Hour: 1

PH_THR 5210: Applied Neurophysiology for Allied Health Students
Principles of basic neurophysiology, emphasizing correlation of structure and function of the nervous system.

Credit Hours: 3

PH_THR 5220: Biophysical Agents
Includes biophysics, theory and techniques concerning usage of biophysical agents as adjuncts to exercise programs. This entails the use of thermal, electrical, light, hydrotherapy, and mechanical agents.

Credit Hours: 3

PH_THR 5230: Clinical Evaluation and Procedures
Principles and procedures of basic evaluation methods and documentation: transfers, body mechanics, muscle strength, range of motion, muscle length, neurologic tests.

Credit Hours: 4
PH_THR 5240: Foundations of Therapeutic Exercise  
Physiologic basis of exercise throughout the lifespan with emphasis on the musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary systems and the effects of injury and disease on these systems.  
**Credit Hours:** 3

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PH_THR 5250: Human Kinesiology  
Study of principles of physical laws, biomechanics and anatomic structure relative to human movement. Applications through analysis of daily functional performance, exercise, and sport.  
**Credit Hours:** 3

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PH_THR 5260: Introduction to Clinical Education and PhysZOU I  
Introduction to the aspects of clinical education. Development of foundational clinical skills and behaviors, includes clinical experience in PhysZOU.  
**Credit Hour:** 1

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PH_THR 5310: Applied Therapeutic Exercise  
Application of therapeutic exercise with an emphasis on evidenced-based exercise prescription, modes and techniques of exercise typically seen in rehabilitation.  
**Credit Hours:** 3

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PH_THR 5320: Clinical Kinesiology  
Advanced Kinesiology addressing functional mobility; specifics of normal human gait; pathokinetics of gait. Assistive devices; wheelchairs; orthoses and prostheses.  
**Credit Hours:** 3

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PH_THR 5330: Clinical Pathophysiology  
Interdisciplinary and case-based examination of the pathophysiology, prevention and general health management of disease/injury across the lifespan encountered in rehabilitation.  
**Credit Hours:** 3

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PH_THR 5340: Introduction to Clinical Education and PhysZOU II  
Continuation of Introduction to Clinical Education and PhysZOU I with further emphasis on current events in the Physical Therapy profession as well as the professional attributes of communication, teamwork and problem solving, includes clinical experience in PhysZOU.  
**Credit Hour:** 1

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PH_THR 5350: Introduction to Orthopedic Physical Therapy with Laboratory  
The physical therapy management of musculoskeletal disorders. A systematic clinical decision making model is introduced that considers the stage of inflammation and repair, impairments, and the systematic anatomical structure.  
**Credit Hours:** 3

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PH_THR 5360: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation. Emphasis on pharmacology related to the musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary systems across the lifespan.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5370: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5380: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5390: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5400: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5410: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5420: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5430: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5440: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5450: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5460: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5470: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5480: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5490: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5500: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5510: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5520: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:**Restricted to students accepted into professional major

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PH_THR 5530: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5540: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5550: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5560: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5570: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5580: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5590: Pharmacology in Rehabilitation  
Principles of pharmacology including pharmacokinetics, pharmacodynamics, and toxicology of common drugs encountered in rehabilitation.  
**Credit Hours:** 2  
**Prerequisites:** Restricted to students accepted into professional major

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PH_THR 5600: Topics in Physical Therapy  
Organized study of selected topics in physical therapy, health and wellness, prevention of disease and disability, and the rehabilitation sciences. Specific content may vary from semester to semester.  
**Credit Hour:** 1-99

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PH_THR 6000: Topics in Physical Therapy  
Organized study of selected topics in physical therapy, health and wellness, prevention of disease and disability, and the rehabilitation sciences. Specific content may vary from semester to semester.  
**Credit Hour:** 1-3

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PH_THR 6410: Clinical Education I  
Full time, supervised clinical experience addressing application of basic skills in patient evaluation and treatment, documentation and professional behaviors.  
**Credit Hours:** 5

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PH_THR 6510: Differential Diagnosis in Physical Therapy  
Evidence-based clinical decision making emphasizing health screenings and system review to determine physical therapy diagnosis/need for referral to other health care professionals.  
**Credit Hours:** 3

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PH_THR 6520: Evidence-Based Practice  
This course focuses on improving students’ knowledge and skills for asking clinical questions, accessing and appraising research evidence, and integrating research, patient preferences, clinical expertise, and context into clinical decision making.  
**Credit Hours:** 3

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PH_THR 6530: Orthopedic Physical Therapy  
Physical therapy diagnosis, management, and prevention of disorders of the musculoskeletal systems; continuation of Introduction to Orthopedic Physical Therapy emphasizing physical therapy interventions.  
**Credit Hours:** 3

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PH_THR 6540: Pediatric Physical Therapy  
Physical therapy evaluation and treatment of children with movement dysfunction. Emphasis on therapeutic exercise.  
**Credit Hours:** 4
PH_THR 6550: PhysZOU III
Part-time clinical experience through PhysZOU clinic. Students will work as a team with peers and a clinical instructor to develop, perform and document physical therapy sessions.
Credit Hours: 0.5

PH_THR 6560: Rehabilitation of the Neurologically Impaired Adult
Physical Therapy evaluation and treatment of adults who have incurred neurological deficits; emphasis on the restorative care of individuals following spinal cord injury, stroke, and traumatic head injury.
Credit Hours: 4

PH_THR 6610: Assessment and Neuropsychology of Pain
Pain is a common problem that impairs people's quality of life and costs millions of dollars annually. Yet, an investigation of physical therapy education programs in the U.S. supported inadequate coverage of pain. This course focuses on the assessment and neuropsychology of pain in order to help future health care providers and scientists to improve the health and well-being of people with impaired quality of life due to pain.
Credit Hour: 1

PH_THR 6620: Case Management: Acute and Chronic Medical and Surgical Conditions
Evaluation and team approach to physical therapy management for persons of all ages with medical and surgical conditions: cardiopulmonary, rheumatic, oncologic, integumentary or wound care, including major burn injury. Psychosocial and ethical issues incorporated.
Credit Hours: 5

PH_THR 6630: Clinical Education II
Continuation of full time, supervised clinical experiences addressing application of clinical skills in patient evaluation, treatment, documentation and professional behaviors. Progression of performance expectations from prior Clinical Education courses.
Credit Hours: 7

PH_THR 6640: Diagnostic Imaging in Rehabilitation
Diagnostic imaging used by disciples within and outside of physical therapy. Emphasis placed on basic skills for analyzing images to determine interpretation of results as they apply to physical therapy examination and intervention.
Credit Hours: 3

PH_THR 6650: PHYSZOU IV
Continuation of part-time clinical experience through PhysZOU clinic. Students work as a team with peers and a clinical instructor to develop, perform and document physical therapy sessions.
Credit Hours: 0.5

PH_THR 6660: Psychosocial Issues for Health Promotion
Psychological and social factors impact people's health and the American Physical Therapy Association has called for interprofessional approaches for the provision of fitness, health promotion, wellness, and risk reduction programs to enhance quality of life for persons across the life-span. This course focuses on psychosocial issues for health promotion in order to help future health care providers and scientists to improve the health and well-being of people.
Credit Hours: 2

PH_THR 6710: Case Management: Neurological Impairments Across the Lifespan
Traditional and contemporary theories of physical therapy in advanced rehabilitation of children and adults with neurologic disorders; education/employment, ethical/legal issues; patient/client advocacy.
Credit Hours: 5

PH_THR 6810: Case Management: Geriatrics and Orthopedics
Complex orthopedic problems in older adults; supervision, reimbursement, ethical/legal situations; community programs for injury prevention.
Credit Hours: 5

PH_THR 6820: Clinical Education III
Continuation of full time, supervised clinical experiences addressing application of clinical skills in patient evaluation, treatment, documentation, and professional behaviors. Progression of performance expectations from prior Clinical Education courses.
Credit Hours: 6

PH_THR 6830: Health Policy for Physical Therapy
This course is designed for physical therapy students and will provide an introduction to health policy along with an overview of the health care system in the United States, including its structures, financing mechanisms, and outcomes.
Credit Hours: 2

PH_THR 6840: PhysZOU V
Continuation of part-time clinical experience through PhysZOU clinic. Students will work as a team with peers and a clinical instructor to develop, perform and document physical therapy sessions.
Credit Hours: 0.5

PH_THR 6850: Professional Issues
The physical therapist as health care professional, administrator, and educator; legal, ethical, and political issues. Service delivery management; delegation of care; rural vs. urban health care needs.
Credit Hours: 3

PH_THR 6910: Clinical Education IV
Continuation of full time, supervised clinical experiences addressing application of clinical skills in patient evaluation, treatment, documentation and professional behaviors. Progression of performance expectations from prior Clinical Education courses.
Credit Hours: 5

PH_THR 6920: PhysZOU VI And Professional Development Plan
Continuation of part-time clinical experience through PhysZOU clinic. Students will work as a team with peers and a clinical instructor to
develop, perform and document physical therapy sessions as well as finalize their Professional Development Plan.

**Credit Hours:** 0.5

**PH_THR 6930: Seminar in Physical Therapy**
Integrate previously learned content in unique patient cases and comprehensive review and evaluation of readiness for entry level physical therapist practice, in both didactic and psycho-motor domains. Enrollment is limited to students in professional physical therapy program.

**Credit Hours:** 4

**PH_THR 6940: Special Skills in Physical Therapy**
This course will offer a menu of options to students to develop additional knowledge about specific skills in the physical therapy profession. Students may choose topics of interest in addition to the mandatory sessions.

**Credit Hour:** 1

**PH_THR 7250: Human Kinesiology**
(same as HTH_PR 4250). Study of principles of physical laws, biomechanics and anatomic structure relative to human movement. Applications through analysis of daily functional performance, exercise, and sport.

**Credit Hours:** 3

**Prerequisites:** Human Anatomy

**PH_THR 7420: Foundations of Therapeutic Exercise**
Physiologic basis of exercise throughout the lifespan with emphasis on the musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary systems and the effects of injury and disease on these systems.

**Credit Hours:** 3

**PH_THR 7550: Psychosocial Issues for Health Promotion**
Psychological and social factors impact people's health and the American Physical Therapy Association has called for interprofessional approaches for the provision of fitness, health promotion, wellness, and risk reduction programs to enhance quality of life for persons across the life-span. This course focuses on psychosocial issues for health promotion in order to help future health care providers and scientists to improve the health and well-being of people. Graded on A-F basis only.

**Credit Hours:** 2

**PH_THR 7850: Assessment and Neuropsychology of Pain**
Pain is a common problem that impairs people's quality of life and costs millions of dollars annually. Yet, an investigation of physical therapy education programs in the U.S. supported inadequate coverage of pain. This course focuses on the assessment and neuropsychology of pain in order to help future health care providers and scientists to improve the health and well-being of people with impaired quality of life due to pain. Graded on A-F basis only.

**Credit Hour:** 1