

# PHYSICAL THERAPY

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Dr. Kimberly Cleary, Professor and Chair  
department web page (<https://www.ewu.edu/chsph/physical-therapy/>)

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## Faculty

Kimberly K. Cleary, Elena N. Crooks, Tanya L. Kinney LaPier, Fahed A. Mehyar, Angela R. Merlo, Cynthia A. Robinson, Joel D. Sattgast.  
Emeritus Faculty: Meryl R. Gersh, Darl Vander Linden, Daniel C. Anton

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## Graduate Degree

DPT–Physical Therapy (<http://catalog.ewu.edu/hs/physical-therapy/physical-therapy-dpt/>)

Required courses in this program of study may have prerequisites. Reference the course description section for clarification.

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## Admission Requirements

The admission process to the DPT Program is competitive. The requirements listed below are the minimum standards to apply to the Program. An overall prerequisite GPA of  $\geq 3.0$  is the minimum required for application.

Steps to apply include:

- Apply to the EWU DPT Program through PTCAS (<http://www.ptcas.org/>).
- Pay the EWU DPT application fee.
- Complete a baccalaureate degree at an accredited institution by July of the year of admission.
- Submit two letters of recommendation as described in PTCAS.
- Complete prerequisite courses designated for the science major. A minimum grade of  $\geq C$  is required to fulfill each prerequisite.
- Submit observation/volunteer hours as described in PTCAS; while not required to apply, 75 hours are *recommended*.
- The Graduate Record Examination (GRE) is not required, but if completed, sharing GRE scores is *recommended*.

## Prerequisite Courses

### Biology (Zoology) with labs

Biology prerequisites include:

- 1 quarter/semester of Human Anatomy
- 1 quarter/semester of Human Physiology
- 1 quarter/semester upper division (300 level or above) in Human or Animal Physiology. This requirement may be satisfied by a course in Exercise Physiology, offered through an Exercise Science Department.
- 1 quarter/semester advanced course (300 level or above) of your choosing in Biology, Zoology or Exercise Science. This course must be at least 3 semester or 4 quarter credits. Recommended courses include: Biomechanics, Cell Biology, Developmental Biology, Embryology, Kinesiology, Microbiology, and Pathology. Classes

in botany, fish and wildlife biology, and ecology do not satisfy this requirement.

### Chemistry with labs

- 3 quarters or 2 semesters of Chemistry

### Physics with labs

- 3 quarters or 2 semesters of Physics

### Psychology or Behavioral Science

- Any 2 courses in behavioral science including psychology, sociology or anthropology

### Statistics

- 1 quarter/semester of Statistics in any discipline

### Additional Requirements

- Anatomy and Physiology or the combined A & P prerequisite courses must be completed within 7 years of admission.
- Courses designated for nursing or allied health professions students are not acceptable in lieu of the science prerequisites listed above.
- Advanced Placement courses are not accepted as prerequisites.
- Courses from other institutions with a pre-Physical Therapy or Physical Therapy title are not acceptable toward meeting prerequisite or professional degree requirements.

## Graduate Program

The Doctor of Physical Therapy (DPT) degree prepares students to diagnose and manage movement dysfunction in patients they serve. The 3-year curriculum consists of 8 sequenced semesters of full-time attendance. In Year 1, DPT students take basic science and physical therapy skill courses. In Year 2, clinical science courses integrate medical science knowledge through increasingly complex clinical problems. Students learn and practice the five elements of patient management (examination, evaluation, diagnosis, prognosis, and intervention) in the context of patients with musculoskeletal, neuromuscular, cardiopulmonary, and integumentary disorders. An Integrated Clinical Education (ICE) experience occurs during Year 2. Evidence-based practice, clinical research, and professional practice issues are embedded throughout the curriculum. Following the second year of the academic curriculum, students take a written comprehensive examination, and successful completion allows advancement to full-time clinical education experiences in Year 3.

The Department of Physical Therapy at Eastern Washington University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

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## Physical Therapy Courses

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**PHTH 501S. ANATOMY 1. 6 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This is a course about the structure and function of the human body, presented in a regional format. Students will develop an understanding of anatomical elements through the study of models, atlas drawings, and photographs. They will also work in small groups to dissect human cadavers. The major emphasis of this course will be on the structures of the upper and lower extremities.

**PHTH 502S. ANATOMY 2. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This is a course about the structure and function of the human body, presented in a regional and systemic approach. Students will develop an understanding of anatomical elements through the study of models, atlas drawings, and photographs. They will also work in small groups to dissect human cadavers. The major emphasis of this course will be on the structures of the head and neck, spine, thorax, abdomen, and pelvis.

**PHTH 511S. CLINICAL KINESIOLOGY. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course focuses on human kinesiology and pathokinesiology. Emphasis is on functional anatomy to acquire understanding of physical therapy examination, evaluation, and therapeutic interventions. Topics include osteokinematics and arthrokinematics.

**PHTH 521S. NEUROSCIENCE 1. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The structure and function of the central nervous system are presented in this foundational course in physical therapy. Course topics include neuronal excitation, somatosensation, cerebral blood supply, cranial nerves, spinal reflexes, motor control, and sleep regulation. Students identify components of the human brain and spinal cord in a cadaver laboratory.

**PHTH 522S. NEUROSCIENCE 2. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course provides opportunities to apply principles of neuroscience to the examination and rehabilitation of individuals with neurological dysfunction. Clinical signs and symptoms of CNS pathology will be presented and related to neurological movement disorders. Students will learn examination strategies to identify neurological dysfunction, and implement select physical therapy interventions directed at the modulation of sensory and motor impairments.

**PHTH 531S. APPLIED EXERCISE PHYSIOLOGY. 6 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course will examine body systems under resting conditions, in response to acute exercise challenge, and with adaptation to chronic exercise. The effects of decreased use and pathology on body function and subsequent activity limitation and participation restrictions will be emphasized. This course will explain the role of physical therapy use of exercise assessment and prescription to improve patient outcomes. Applied clinical reasoning will be fostered through use of full patient cases.

**PHTH 541S. PATIENT MANAGEMENT 1. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course focuses on fundamentals of physical therapy examination and evaluation. Examination and evaluation training will include vital signs, pain assessment, neurological examination, goniometry, and manual muscle testing.

**PHTH 542S. PATIENT MANAGEMENT 2. 4 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course provides the student with classroom discussion and laboratory experiences on the clinical applications of physical therapy interventions. These include mobility training, massage, superficial and deep heat modalities, cryotherapy, and electromodalities. Foundational patient management skills such as positioning, draping, transfer training, gait training, and equipment prescription are also included.

**PHTH 551S. SCREENING FOR DISEASE. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course introduces students to screening for referral in physical therapy practice. Students learn how to review the major body systems and screen for diseases that mimic neuromusculoskeletal conditions and warrant referral to a primary care provider.

**PHTH 552S. PHARMACOLOGY FOR PHYSICAL THERAPISTS. 2 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course provides a basic knowledge of pharmacology for the physical therapist in order to incorporate the effects of drugs into the design and implementation of patient care. Patient cases will be used to reinforce problem-solving and integration of basic science principles with clinical application.

**PHTH 561S. EVIDENCE BASED PRACTICE. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The first of five courses on physical therapy evidence-based practice. Emphasis is on the development of clinical research questions, literature review, critical appraisal, and application of research principles to clinical problems.

**PHTH 562S. RESEARCH METHODS. 2 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The second of five courses on physical therapy evidence-based practice. Emphasis is on critical appraisal of the evidence including research design, research methods, and statistical analyses.

**PHTH 571S. PT PRACTICE SEMINAR 1. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course examines the professional role and governing laws of the physical therapist, the American Physical Therapy Association Standards of Practice and Code of Ethics, and characteristics of physical therapy services across practice environments. Preparation for clinical education experiences includes training in HIPAA, HIV/AIDS, medical terminology, and clinical documentation.

**PHTH 572S. PT PRACTICE SEMINAR 2. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course considers professional behaviors, cultural competence, and the role of self-reflection and feedback in professional development. Preparation for clinical education experiences includes First Aid, CPR, and blood borne pathogens trainings. Integrated clinical education experiences allow application of professional knowledge and skills.

**PHTH 596S. EXPERIMENTAL COURSE. 1-6 Credits.**

Experimental.

**PHTH 599S. INDEPENDENT STUDY. 1-5 Credits.**

Independent Study.

**PHTH 612S. MUSCULOSKELETAL 1. 6 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is the first in a two-part series about patient examination, evaluation, pathophysiology, and intervention of the musculoskeletal system. Concepts integrated throughout this course include conditions related to the upper quarter and axial skeleton, as well as clinical reasoning related to comprehensive patient care.

**PHTH 613S. MUSCULOSKELETAL 2. 6 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is the second in a two-part series about patient examination, evaluation, pathophysiology, and intervention of the musculoskeletal system. Concepts integrated throughout this course include conditions related to the lower quarter and axial skeleton, as well as clinical reasoning related to comprehensive patient care.

**PHTH 623S. NEUROMUSCULAR. 6 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is on examination, evaluation, and intervention of the neuromuscular system. Content includes, but is not limited to, neurological principles and diagnoses including stroke, brain injury, spinal cord injury, degenerative diseases, and tumors or infections of the central nervous system. Emphasis will be on patient management in the inpatient rehabilitation, neurointensive care, and acute care settings. Other topics include assistive technology and equipment.

**PHTH 632S. CARDIOPULMONARY. 4 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course addresses the management of cardiovascular and/or pulmonary impairments in patients with disability. Emphasis will be placed on examination, evaluation, and treatment of patients across rehabilitation settings. Health promotion and wellness strategies for patients with participation restrictions will be highlighted. Applied clinical reasoning will be fostered through the use of comprehensive patient cases.

**PHTH 639S. TOPICS IN PHYSICAL THERAPY. 2 Credits.**

**Notes:** students must complete two separate sections of this course for a total of 4 credits.

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course introduces the student to advanced topics in physical therapy. Students choose two topics to study in detail.

**PHTH 654S. MEDICALLY COMPLEX PATIENTS. 5 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course will address the physical therapy management of medically complicated patients. Emphasis will be placed on examination, evaluation, and interventions of patients in inpatient settings. Students will learn how to develop a plan of care that promotes movement, restores function and prevents disability from trauma, critical illness, and surgery.

**PHTH 655S. PEDIATRICS. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

Management of the pediatric client with a diverse variety of movement challenges. Topics include theories of typical and atypical development, standardized assessments, common treatment techniques, equipment, orthotics, and adaptive technology for pediatric clients.

**PHTH 657S. SPECIAL POPULATIONS. 3 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course is on physical therapy examination, evaluation, and intervention of patients with cancer, psychiatric disorders, integumentary system disorders, and amputations who require rehabilitation and/or prosthetic training.

**PHTH 663S. CLINICAL RESEARCH 1. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The third of five courses on physical therapy evidence-based practice. Students will work with faculty mentors to conduct clinical or laboratory research projects.

**PHTH 673S. PT PRACTICE SEMINAR 3. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course explores the culturally competent and ethical practice of physical therapy based upon ethical and legal theories and models, and documents that guide the professional conduct of the physical therapist. Emphasis is on developing cultural humility, self-reflection, and learning strategies to facilitate breadth and depth of professional knowledge and skill.

**PHTH 674S. PT PRACTICE SEMINAR 4. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course prepares students for full-time clinical education experiences, including training for performance assessment. Students discuss delegation of physical therapy services, explore stress management strategies in academic and clinical settings, and prepare for their professional job search.

**PHTH 675S. PT PRACTICE SEMINAR 5. 1 Credit.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

This course emphasizes the delivery of health care services, specifically physical therapy services. Topics include financial, legal, humanitarian, and ethical issues related to physical therapy practice, social responsibility, advocacy, and professional development.

**PHTH 676S. PT ADMINISTRATION. 2 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

Introduction to professional responsibilities expected of a physical therapist employed in multiple settings and administrator duties. Topics include management theory and principles, organizational structure, billing, healthcare policy and laws, marketing, and leadership skills.

**PHTH 696S. EXPERIMENTAL COURSE. 1-6 Credits.**

Experimental

**PHTH 699S. INDEPENDENT STUDY. 1-5 Credits.**

Independent Study.

**PHTH 764S. CLINICAL RESEARCH 2. 2 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The fourth of five courses on physical therapy evidence-based practice. Students will work with faculty mentors to conduct clinical or laboratory research projects.

**PHTH 765S. CLINICAL RESEARCH 3. 4 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

The fifth of five courses on physical therapy evidence-based practice. Students will work with faculty mentors to conduct clinical or laboratory research projects.

**PHTH 781S. CLINICAL EDUCATION EXPERIENCE 1. 8 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

Ten week, full-time clinical education experience.

**PHTH 782S. CLINICAL EDUCATION EXPERIENCE 2. 8 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

Ten week, full-time clinical education experience.

**PHTH 783S. CLINICAL EDUCATION EXPERIENCE 3. 10 Credits.**

**Pre-requisites:** all courses in physical therapy are restricted to students accepted into the program.

Twelve week, full-time clinical education experience.

**PHTH 799S. INDEPENDENT STUDY. 1-5 Credits.**

Independent Study.