

## Physical Therapy

Physical therapists, or PTs, are health care professionals who evaluate and treat people with health problems resulting from injury, disease, or biomechanical dysfunction. Physical therapists are integral members of the primary care team and are involved in prevention of disability and promotion of positive health, as well as acting consultants in restorative care.

Physical therapy includes the following:

1. examining and evaluating patients with health-related conditions, impairments, functional limitations, and disability in order to determine a diagnosis, prognosis, and intervention;
2. alleviating impairments and functional limitations by designing, implementing, and modifying therapeutic interventions;
3. preventing injury, impairments, functional limitations, and disability while promoting and maintaining fitness, health, and quality of life in all age populations; and
4. engaging in consultation, education, and research.

## Master of Physical Therapy

Physical therapy practice today is based on a well-developed body of scientific and clinical knowledge. Physical therapists apply knowledge from the basic, behavioral, and social sciences. Physical therapists must also demonstrate effective communication skills. Insight and sensitivity to the unique needs of diverse populations is essential to effectively maximize the individual's functional potential in society.

The physical therapy student will be educated with a thorough knowledge base and will be capable of critical thinking, ethical practice, and provision of service to meet the changing needs of society. Students learn effective analysis and interpretation of data with which to diagnose neuromusculoskeletal movement dysfunction, make treatment-planning decisions, and predict outcomes based on sound research principles.

The graduate will be prepared to assume the multidimensional roles of the master clinician including patient care, education, consultation, and administration of physical therapy services in the broad spectrum of physical therapy practice settings and across the broad age spectrum from neonates to geriatrics.

Individuals must possess a baccalaureate degree and complete all prerequisite requirements prior to beginning the professional major. Following successful completion of the professional curriculum, the student receives the M.P.T. degree.

Completion of a postgraduate internship is required to be eligible to seek a license to practice physical therapy in the state of California.

At present, the program is a six semester full-time course of study that prepares students for entry-level practice in a variety of clinical settings. The curriculum design is a regional integrated approach to patient management with special emphasis on problem solving. Substantial revisions in the master's program are being considered and will be implemented no later than the fall semester of 2003. Students preparing for admission are advised to stay closely in touch with the program for details. Changes will be distributed in brochures as they are finalized and posted on the department's Website at <http://www.csufresno.edu/physicaltherapy>.

## Faculty and Facilities

The faculty is composed of physical therapists that collectively have advanced preparation in all major areas of physical therapy. Most have earned doctorates or advanced specialty certification. Together they represent extensive years of clinical experience. Many faculty members continue to engage in practice in tandem with their faculty responsibilities. Several have held significant positions of leadership in professional associations and have authored textbooks used nationally; several also publish regularly in professional journals. Their efforts have been recognized frequently with prestigious awards from the profession and the community.

Clinical laboratory experiences are conducted in a variety of health care facilities throughout the state of California and out of state on a limited basis.

## Career Opportunities

Physical therapists practice in acute care or subacute care hospitals, private physical therapy offices, community health centers, industrial health centers, sports facilities, rehabilitation centers, nursing homes, home health agencies, schools, or pediatric centers. Others work in research institutions or teach in colleges and universities.

College of Health  
and Human Services

## Department of Physical Therapy

Kathleen A. Curtis, *Interim Chair*

Ora Shipe, *Administrative Support  
Coordinator*

McLane Hall, Room 188

(559) 278-2625

<http://www.csufresno.edu/physicaltherapy>

## M.P.T., Master of Physical Therapy

### Faculty

Kathleen A. Curtis, *Interim Chair*

Janet K. Duttarar

Joanne M. Laslovich

Gary L. Lentell

Robert K. Martin

Peggy Trueblood

Toni Tyner

## Admissions to Master of Physical Therapy Graduate Program

The program admission process begins a year prior to planned entry into the Physical Therapy Program.

Admission to the university for postbaccalaureate students occurs in two phases: admission to the university and admission to the Division of Graduate Studies for Physical Therapy. Acceptance to the university does not guarantee admission to graduate studies. Only those students who are admitted to both the university and to graduate studies as physical therapy graduate students will be granted graduate student standing in the M.P.T. program. (Review *Graduate Studies* section in this catalog for graduate admissions).

Students with a bachelor's degree are eligible for unclassified postbaccalaureate status while completing prerequisite coursework.

**Physical Therapy Applications are available: June 1**

**Physical Therapy Application Filing Period: September 1 through November 30**

A complete application includes an information application, an official transcript from each institution attended including previous spring and summer terms, observation verification, and letters of reference. Late transcripts or documentation will result in not being considered. Follow program application instructions.

# Physical Therapy

The screening committee reviews the following admission criteria:

1. Complete all prerequisites as listed. The applicant must have completed or must be currently enrolled in the following lower-division courses at time of application. All lower-division courses must be completed by the end of the fall semester prior to admission to the program.

## Lower division

### Anatomy

Fresno State: PHYAN 64, 65

Transfer: Human anatomy with lab and human physiology with lab

### Chemistry

Fresno State: CHEM 3A, 3B or CHEM 1A, 1B

Transfer: Inorganic and organic or biochemistry with labs

### Psychology

Fresno State: PSYCH 10

Transfer: General psychology

### Physics

Fresno State: PHYS 2A, 2B

Transfer: Physics with lab including mechanics, heat, light, sound, and electricity

### Statistics

Fresno State: H S 92

Transfer: Introduction to basic statistics

## Upper division

PSYCH 166 (Abnormal Psychology)

PSYCH 169 (Psychology of Disability)

PHYAN 130 (Neuroanatomy)

PHYAN 140 (Neurophysiology)

2. Only upper-division prerequisite courses may be completed during the spring term prior to admission to the program. It is highly recommended that the students complete Neuroanatomy (PHYAN 130) and Neurophysiology (PHYAN 140) prior to admission to the program. Outstanding applicants may be considered for admission with PHYAN 130 and 140 pending with the condition that they must be completed with a *C* or better during the first year of the program.
3. A grade of *C* or better in each prerequisite and a total prerequisite GPA of 3.0 is required. An overall GPA of 2.5 on

the last 60 units completed is required. *CR/NC* grades, correspondence courses or independent study courses cannot be used for prerequisite requirements. Only those prerequisite courses completed by the end of the fall semester in which application is made will be counted toward ranking of candidates for selection into the major.

4. Provide evidence of knowledge of physical therapy through employment, volunteer work, or observation in a physical therapy department for a minimum of 100 hours. Fifty hours must be in a general acute care setting; 50 hours may be in a special area of practice. All observation hours must be under the supervision of a licensed physical therapist.
5. Participate in a personal interview.
6. Final transcripts from institutions other than Fresno State must be submitted as soon as grades are posted. Request transcripts prior to the end of the term.

Meeting the foregoing criteria does not guarantee acceptance into the major.

Students transferring from community colleges and other colleges or universities who meet the foregoing criteria are considered on the same basis as California State University, Fresno students applying for admission to the major.

For department application or admission information, write to the following address and enclose a self-addressed, stamped, legal-size envelope:

### Admissions:

**Department of Physical Therapy  
College of Health and Human Services  
California State University, Fresno  
2345 E. San Ramon Ave. M/S MH29  
Fresno, CA 93740-8031**

Criteria for retention and progression in the program include a grade of *C* or better in each physical therapy course, an overall GPA of 3.0, and completion of all courses in the major.

Students must carry malpractice insurance, must purchase an appropriate laboratory coat, and must provide their own transportation to hospitals and clinics for off-campus classes and clinical laboratories. Additional laboratory fees may be required. Students must also provide for all expenses while taking the postbaccalaureate clinical internship. Expenses include student fees, housing, meals, and travel.

## Requirements for the Master of Physical Therapy

Units

<b>Core Requirements .....</b>	<b>45</b>
Biological Sciences .....	(13)
PH TH 125, 126, 127, 128	
Behavioral Sciences .....	(3)
PH TH 142	
Clinical Sciences <sup>1</sup> .....	(28)
PH TH 120, 121, 123, 124, 130, 131, 132, 133, 134, 151, 152	
<b>MP.T. Degree requirements .....</b>	<b>41</b>
Core <sup>2</sup> .....	(35)
PH TH 200, 201, 203, 204, 221, 222, 223, 226, 231, 232, 251, 252, 253, 292A, 292B	
Electives .....	(6)
PH TH 240-249	
Comprehensive Examination	
<b>Postgraduate Internship Certification requirements .....</b>	<b>12</b>
PH TH 275 <sup>3</sup>	
<b>Total .....</b>	<b>98</b>

<sup>1</sup> Open only to students who have been admitted into the physical therapy major.

<sup>2</sup> PH TH 251, 252, 253 and advanced practicum and PH TH 275 postgraduate internship are conducted in a variety of clinical facilities throughout the state. Students must provide for all expenses including housing, meals, and travel. These courses are offered *CR/NC* only.

<sup>3</sup> PH TH 275 must be completed to be eligible to take the state examination for licensure.

The Master of Physical Therapy program is open to all college graduates with a bachelor's degree who have met prerequisite requirements and show intellectual promise and ability to perform at a satisfactory level during their graduate studies.

**Classified Graduate Standing.** The applicant to be considered for classification in the graduate program must meet the following criteria:

1. Complete all prerequisite coursework with an overall GPA of 3.0 and a *C* or better in every course.
2. Earn an overall GPA of 2.5 in the last 60 units completed.
3. Receive a satisfactory score on the Graduate Record Exam. Students are encouraged to take the GRE early to avoid delays in acceptance for graduate work.
4. Have received or be eligible to receive a bachelor's degree.
5. Be recommended by the physical therapy faculty.

## Advancement to Candidacy Requirements

1. Classified graduate student status
2. Earn a minimum GPA of 3.0 in all program graduate coursework and a *C* or better in every course.
3. Complete all clinical coursework with a satisfactory grade.
4. Demonstrate graduate level writing proficiency (assessment of a portfolio of writings is used).
5. Obtain approval from the faculty to take the department's comprehensive written or oral examination.

A culminating experience is required of all Fresno State master's degree candidates. Students in physical therapy satisfy the requirement through a written and/or an oral examination.

## COURSES

### *Physical Therapy (PH TH)*

#### 105. Medical Terminology for Health Professionals (2)

Recommended for physical therapy majors, but open to all students. Study of word parts, definitions, spelling, analysis, synthesis, and use of medical vocabulary.

#### 110. Patient Advocacy for Health Practitioners (3)

Prerequisite: PSYCH 10. May be taken concurrently with PSYCH 166. Recommended for health professions students, but open to all students. Exploration of psychosocial and cultural considerations and community resource management for persons with physical impairment. (Formerly HSW 101)

#### 119. Neuro-Musculoskeletal Anatomy (3)

Cannot be substituted for PH TH 125. An in-depth study of the structure and function of the musculoskeletal system. Includes a laboratory utilizing cadavers and prosected material to integrate muscle and tendon attachments with bony landmarks. (2 lecture, 3 lab hours) (Instructional materials fee, \$35)

#### 120. Professional Orientation (1)

An introduction to the professional practice of physical therapy, including roles and functions within the health care delivery system and professional responsibilities.

#### 121. Patient Management Skills (3)

Selected theory and clinical application of therapeutic modalities and procedures in the treatment of physical disabilities, including physical agents, exercise, and massage. (2 lecture, 3 lab hours)

#### 123. Introduction to Supervision for Physical Therapy Services (1)

Prerequisite: PH TH 120. Principles of delegation of duties in provision of physical

therapy services. Study of the role of the staff therapist in provision of health care services.

#### 124. Research Methods in Physical Therapy (2)

Prerequisite: H S 92 or MATH 11. Study of research design and critical reading of research literature.

#### 125. Applied Human Anatomy of the Musculoskeletal System (4)

Prerequisites: PHYAN 64, 65. Study of the structure and function of the neuro-musculoskeletal systems with emphasis on surface, muscle anatomy and joint anatomy, nerve and blood supply. Includes dissection lab and prosected materials. (3 lecture, 3 dissection lab hours) (Instructional materials fee, \$35)

#### 126. Applied Pathophysiology (4)

Prerequisites: PHYAN 64, 65. Advanced study of physiology of body systems and responses to normal aging, environmental influences and pathological dysfunction, including cardiovascular, pulmonary, endocrine, and integumentary systems. Includes dissection lab and prosected materials. (3 lecture, 3 dissection lab hours)

#### 127. Neuromuscular Processes in Human Development and Aging (3)

The study of human development from birth to senescence with focus on concepts of motor and neurological development processes integral to evaluation and treatment intervention in neurological disability. (2 lecture, 3 lab hours)

#### 128. Applied Human Anatomy and Biomechanics of the Neuro-musculoskeletal System (2)

Prerequisite: PH TH 125. Open to physical therapy majors only. Study of the structure, function and biomechanics of neuro-musculoskeletal systems with emphasis on joints, spine, and gait. Includes dissection lab and prosected materials. (1 lecture, 3 dissection lab hours) (Instructional materials fee, \$35)

#### 130. Evaluation and Clinical Management of Musculoskeletal Conditions I (4)

A study of musculoskeletal disabilities with emphasis on evaluation techniques, methods of therapeutic intervention, and program planning. Includes selected lectures by medical practitioners in the medical-surgical management of orthopedic conditions. (3 lecture, 3 lab hours)

#### 131. Evaluation and Clinical Management of Musculoskeletal Conditions II (4)

Prerequisite: PH TH 130. A continuation of Evaluation and Clinical Management of

Musculoskeletal Conditions I. (3 lecture, 3 lab hours)

#### 132. Evaluation and Clinical Management of Neurological Systems I (3)

A study of neurological disabilities in therapeutic intervention and program planning. Includes selected lectures by medical practitioners in the medical-surgical management of neurological conditions. (2 lecture, 3 lab hours)

#### 133. Evaluation and Clinical Management of Neurological Systems II (3)

Prerequisite: PH TH 132. Continuation of Evaluation and Clinical Management of Neurological Systems I. (2 lecture, 3 lab hours)

#### 134. Evaluation and Clinical Management of Selected Body Systems (3)

Evaluation and therapeutic intervention in the clinical management of normal and pathological conditions of the cardiopulmonary and other selected body systems. (2 lecture, 3 lab hours)

#### 142. Concepts of Patient Compliance (3)

Study of theories and concepts which influence patient management effectiveness and compliance.

#### 151. Clinical Lab I (2)

Prerequisite: PH TH 121. Clinical experience under the direct supervision of academic faculty in selected hospitals. *CR/NC* grading only.

#### 152. Clinical Lab II (2)

Prerequisite: PH TH 151. The application of physical therapy skills and procedures in selected hospitals. *CR/NC* grading only.

#### 175. Postbaccalaureate Clinical Internship (12)

Prerequisite: PH TH 152. Final clinical experience for majors. The internship is 18 weeks of clinical experience at selected hospital settings throughout the state. Certification of internship completion is required before the graduate is eligible to take the state examination for licensure. *CR/NC* grading only.

#### 180T. Topics in Physical Therapy (1-3; max total 12 if no topic repeated)

Prerequisite: permission of instructor. Advanced techniques in physical therapy and new trends relating to the care of patients.

#### 190. Independent Study (1-3; max total 6)

See *Academic Placement — Independent Study*. Approved for *SP* grading.

# Physical Therapy

## GRADUATE COURSES

### **Physical Therapy (PH TH)**

#### **200. Advanced Anatomy and Pathokinesiology (4)**

Prerequisites: PH TH 125, 128. Investigation of concepts of biophysics, analysis of normal and abnormal movement. Includes dissection of lab and projected materials. (3 lecture, 3 dissection lab hours) (Instructional materials fee, \$35)

#### **201. Advanced Evaluation and Clinical Management of Cardiopulmonary Dysfunction (3)**

Prerequisites: PH TH 126, 134. Investigation and analysis of evaluation and therapeutic intervention in the clinical management of the cardiovascular/pulmonary system. (2 lecture, 3 lab hours)

#### **203. Advanced Evaluation and Clinical Management of Special Orthopedic Problems (3)**

Prerequisites: PH TH 131, 200. Advanced specialized approaches to musculoskeletal disabilities with emphasis on evaluation techniques, therapeutic intervention and program planning for the patient with selected orthopedic problems. (2 lecture, 3 lab hours)

#### **204. Advanced Evaluation and Clinical Management of Special Neurological Problems (3)**

Prerequisites: PH TH 127, 133. Advanced specialized approaches to neurological disabilities with emphasis on evaluation techniques, therapeutic intervention and program planning for the patient with selected neurologic problems. (2 lecture, 3 lab hours)

#### **221. Seminar in Clinical Decision Making I (2)**

Use of decision analysis and case management theory to master concepts in clinical decision making. Analysis and research of patient problems, synthesis of physical therapy theory and integration of cultural, psychosocial, and community resources to formulate treatment consistent with contemporary practice.

#### **222. Seminar in Clinical Decision Making II (1)**

Prerequisite: PH TH 221. Continuation of Seminar in Clinical Decision Making I.

#### **223. Seminar in Clinical Decision Making III (1)**

Prerequisite: PH TH 222. Continuation of Seminar in Clinical Decision Making II.

#### **226. Electrophysiologic Approaches to Patient Care (3)**

Prerequisites: PH TH 121, 126; PHYAN 140. Exploration of advanced theories and principles related to the clinical use of

electrophysiologic modalities. Includes electroneuromuscular stimulation for motor performance, nerve function, pain management and tissue repair. (2 lecture, 3 lab hours)

#### **231. Seminar in Health Care Issues I (2)**

Investigation and discussion of the health care delivery system and its impact on the delivery of physical therapy services.

#### **232. Seminar in Health Care Issues II (2)**

Prerequisite: PH TH 231. Investigation and discussion of administration and organization of physical therapy services in the health care delivery system.

#### **240. Advances in Orthopedic Physical Therapy I (2)**

Prerequisite: PH TH 203 or permission of instructor. Exploration of treatment of orthopedic problems.

#### **241. Advances in Physical Therapy II (2)**

Prerequisite: PH TH 240 or permission of instructor. A continuation of Advances in Orthopedic Physical Therapy I.

#### **242. Advanced Clinical Anatomy I (2)**

Prerequisite: PH TH 200 or permission of instructor. Exploration of clinical application of anatomical structures of joints.

#### **243. Advanced Clinical Anatomy II (2)**

Prerequisite: PH TH 242 or permission of instructor. A continuation of Advanced Clinical Anatomy I.

#### **244. Advances in Management of the Aging Population (2)**

Prerequisite: PH TH 127 or permission of instructor. Exploration of special approaches and considerations of intervention of conditions of aging.

#### **245. Advances in Management of the Neurological Patient (2)**

Prerequisite: PH TH 204 or permission of instructor. Exploration of advanced multi-system treatment approaches in neuro-rehabilitation.

#### **246. Management Strategies for Independent Practice (2)**

Prerequisite: permission of instructor. Exploration of strategies for developing and maintaining a physical therapy service in an independent environment.

#### **247. Sports Injuries (2)**

Prerequisite: PH TH 200 or permission of instructor. Exploration in advances in management of sports injuries.

#### **248. Advances in Cardiac Rehabilitation (2)**

Prerequisite: PH TH 201 or permission of instructor. Exploration of the components of implementing and maintaining multilevels of cardiac rehabilitation and the management of patients with cardiac disease.

#### **249. Contemporary Issues in Delivery of Physical Therapy Services (2)**

Prerequisite: permission of instructor. Exploration of emerging trends and issues in contemporary physical therapy practice.

#### **251. Advanced Clinical Practicum I (2)**

Clinical practice in selected health care facilities throughout the state. *CR/NC* grading only.

#### **252. Advanced Clinical Practicum II (2)**

Prerequisite: PH TH 251. Clinical practice in patient evaluation, treatment planning, and outcome evaluation in a variety of clinical settings located throughout the state. *CR/NC* grading only.

#### **253. Advanced Clinical Practicum III (2)**

Prerequisite: PH TH 252. Continuation of Advanced Clinical Practicum II. *CR/NC* grading only.

#### **275. Postgraduate Clinical Internship (12)**

Prerequisite: PH TH 253. Final experience for majors. The internship is 18 weeks of clinical experience at selected facilities throughout the state. Certification of internship completion is required before the graduate is eligible to take the state examination for licensure. *CR/NC* grading only.

#### **290. Independent Study (1)**

Supervised guidance for students who wish to do additional work on research. Approved for *SP* grading.

#### **292A. Advanced Physical Therapy Research: Problem Formulation and Method (3)**

Explores advanced topics in physical therapy research including conceptualization, operation utilization, design and sampling strategies. It allows students to prepare a proposal for an independently pursued, empirically based research project.

#### **292B. Advanced Physical Therapy Research: Data Collection and Analysis (3)**

Prerequisite: PH TH 292A. Examines advanced strategies for physical therapy research data collection and analysis. Students are able to independently collect data, analyze it and report findings from a research project.

## IN-SERVICE COURSE

(See *Course Numbering System*.)

### **Physical Therapy (PH TH)**

#### **302T. Topics in Physical Therapy (1-6; repeatable with different topics)**

Selected topics in physical therapy for practicing clinicians in the health fields.