



# PHYSICAL THERAPY

BACHELOR OF SCIENCE

## PROGRAM DESCRIPTION

The profession of Physical Therapy is an integral component of health care that is dedicated to the promotion of health, prevention of disability and restoration of optimal function.

The program offers a two year upper division professional curriculum leading to a Bachelor of Science degree in Physical Therapy. The structured curriculum is designed to prepare practitioners who, by virtue of clinical reasoning skills, diagnostic proficiency, ethical standards and the ability to integrate scientific principles and clinical skills, are able to provide care to correct, prevent or alleviate motion disorders and pain. The program emphasizes independent, self-directed study and a problem solving approach to acquiring knowledge and clinical competencies.

Clinical experiences and training are integrated throughout the four semester program and culminates in an eighteen week affiliation after the conclusion of the final semester. Completion of the postbaccalaureate internship is required in order to qualify for the State of California licensure examination.

## FACULTY

Stanley Geel, *Director*

Susan McGinty, *Academic Coordinator of Clinical Education*  
Susan Edmond, *Faculty*

Jerri McAtee, *Program Secretary*  
Program Office: SLN-4000, 278-6426

## FEATURES

The faculty are committed to providing a learning environment that encourages analytical reasoning skills, stimulates inquiry and a dedication to professional growth, cultivates the development of independence and self reliance and promotes the pursuit of excellence.

The faculty share the responsibility of preparing professionals who assume multi-faceted and expanding roles consistent with changing practice trends, and who recognize the ethical, cultural, and psychosocial elements of health care.

The program provides opportunities for development of knowledge and clinical skills in areas of evaluation, goal establishment, treatment planning, implementation, and modification through extensive laboratory practicums, case studies and computer-assisted instruction. Excellent computer facilities are contained in a dedicated laboratory for self-guided and interactive learning experiences in Anatomy and Neuroscience.

Excellent clinical, collaborative research and educational resources exist in conveniently located major hospitals, universities, and medical centers.

Enrollment is designated as "impacted" and limited to 32 students in the Fall of each year. Supplementary criteria are, therefore, employed for selection into the major.

## CAREER POSSIBILITIES

Hospitals • Ambulatory Care Centers • Private Practice, Sports Medicine Centers • Rehabilitation Centers • Industries • Extended Care Facilities • Home Health Care • Schools • University Teaching and Research • Consulting

## Admission Requirements

Admission criteria are reviewed by a screening committee.

- Eligibility as a student at CSUS.
- A minimum GPA of 3.0 in the last 60 units of coursework.
- A minimum GPA of 3.0 in the prerequisite coursework.
- All prerequisite Biology courses must be taken within 10 years of the date of expected enrollment.
- Completion of all lower division General Education and other graduation requirements (with the exception of two, which must be completed in the Spring semester of the year of anticipated enrollment) by the January 30th Physical Therapy application deadline to the program (second degree applicants are exempt).
- Completion of all prerequisite courses (with the exception of two, which must be completed in the Spring semester of the year of anticipated enrollment) by the January 30th Physical Therapy application deadline to the program.
- Three letters of recommendation, two from Physical Therapists and one from an academician.
- A minimum of 160 hours of volunteer or paid experience under the supervision of a Physical Therapist in at least two different settings.
- Current CPR certification (adult/infant).
- Second degree applicants must complete the Writing Proficiency Examination (WPE) and where applicable, a State Government and U.S. Constitution and U.S. History course(s).
- Admission is restricted to those who satisfy California residence requirements. To qualify, applicants must be eligible for residency status by the Admissions Office prior to entering the Program in the Fall.

## Application Procedures

Applicants who are graduates or undergraduates not currently enrolled at CSUS, students who have applied for graduation from CSUS, or those who have not attended CSUS in either of the preceding two semesters, must apply for admission to the University by November 30th in the year preceding expected enrollment in the Program.

A separate supplementary application (available in September) is required for the Physical Therapy Program and must be received by January 30th in the year of anticipated admission.

## Selection Criteria

The first screening of applicants will occur following a rank-ordering of total points assigned to:

- Prerequisite GPA
- Last 60 units GPA
- Three letters of recommendation
- Written narrative
- Special characteristics including proficiency in a second language, economic, educational, and environmental disadvantage, under-representation in the profession, and recent active military honorable discharge.

A complete description of selection criteria may be obtained from the Physical Therapy Degree Program office.

The top 80 applicants are interviewed and the final 32 students are selected based on the scores from the first screening, in combination with the points awarded in the interview.

---

## ADDITIONAL INFORMATION

---

### Health Requirements

Students admitted to the Physical Therapy Program are required to have a physical examination and specified immunizations by the Student Health Center or a private physician prior to beginning the Physical Therapy Program. Complete information on health requirements for Physical Therapy students may be secured from the Physical Therapy office.

### Admission Advising

Group advising sessions with Physical Therapy faculty are scheduled throughout the year. Times of these meetings are available in the Physical Therapy office (916) 278-6426.

### Health Insurance, Transportation and CPR Certification

All students accepted into the Physical Therapy Program must provide their own health insurance and transportation to clinical facilities. Health insurance is mandatory prior to beginning clinical experiences. CPR certification is required and recertification must be maintained according to the requirements of the American Heart Association or American Red Cross.

---

## MAJOR REQUIREMENTS • BS

---

Total units required for BS: 127

Total units required for Prerequisite Courses: 35

Total units required for Major: 59

**Courses in parentheses are prerequisites.**

#### A. Required Prerequisite Courses (35 units)

- |     |         |  |           |
|-----|---------|--|-----------|
| (3) | BIO 10  | Basic Biological Concepts  | <b>OR</b> |
|     | BIO 20  | Biology: A Human Perspective   |           |
| (4) | BIO 22  | Introductory Human Anatomy (BIO 10)  |           |
| (4) | BIO 131 | Systemic Physiology (BIO 10, 20, or 22, and one year of college chemistry) |           |
| (5) | CHEM 6A | Introduction to General Chemistry  | <b>OR</b> |
|     | CHEM 1A | General Chemistry  |           |
| (5) | CHEM 6B | Introduction to Organic and Biological Chemistry (CHEM 6A or 1A)           | <b>OR</b> |
|     | CHEM 1B | General Chemistry (CHEM 1A)  |           |
| (4) | PHYS 5A | General Physics: Mechanics, Heat, Sound                                    |           |
| (4) | PHYS 5B | General Physics: Light, Electricity and Magnetism, Modern Physics          |           |
| (3) | PSYCH 5 | Introductory Psychology: Individual and Social Processes                   |           |
| (3) | STAT 1  | Introduction to Statistics   |           |

#### B. Required Professional Courses (59 units)

- |     |          |                                |  |
|-----|----------|--------------------------------|--|
| (4) | BIO 133  | Gross Anatomy                  |  |
| (4) | BIO 135  | Neuro Anatomy/Neuro Physiology |  |
| (2) | NURS 130 | Pathophysiology                |  |
| (3) | PE 151B  | Clinical Kinesiology           |  |
| (3) | PE 152E  | Clinical Exercise Physiology   |  |
| (3) | PT 102   | Therapeutic Exercise           |  |

- (3) PT 104 Therapeutic Procedures
- (2) PT 106 Psycho-Social Aspects of Physical Disability
- (4) PT 107A Clinical Assessment & Physical Therapy Management I
- (5) PT 107B Clinical Assessment & Physical Therapy Management II
- (5) PT 107C Clinical Assessment & Physical Therapy Management III
- (2) PT 108 Therapeutic Agents
- (2) PT 109A Research Methods I
- (2) PT 109B Research Methods II
- (2) PT 110A Clinical Education I
- (1) PT 110B Clinical Education II
- (1) PT 110C Clinical Education III
- (2) PT 111 Topics in Physical Therapy
- (2) PT 112 Geriatrics
- (2) PT 113 Human Movement Science
- (1) PT 114 Advanced Assessment and Clinical Screening
- (2) PT 115A Health Care Delivery I
- (2) PT 115B Health Care Delivery II

**Note:** At the completion of the above coursework, students will be assigned to 18 weeks of full-time, progressively independent practice in clinical settings. Completion of these assignments will lead to certification of clinical competence and eligibility to take the licensure examination. See department for registration information.

---

## UPPER DIVISION COURSES

---

**102. Therapeutic Exercise.** The clinical application of exercise for the prevention of limitations, improvement of functional abilities and the treatment of disorders associated with the neuromuscular, skeletal and cardiopulmonary systems. Principles of motor control with an emphasis on application to exercise. Open to Physical Therapy majors only. Lecture two hours, laboratory three hours. 3 units.

**104. Therapeutic Procedures.** An introduction to basic physical assessment and patient management skills. Students will practice and demonstrate techniques under faculty supervision in the following areas: manual strength testing, evaluation of joint mobility, positioning, transfers, ambulation activities, wheelchair and assistive device mobility, activities of daily living, principles of assessment techniques, vital signs, and surface palpation. Open to Physical Therapy majors only. Lecture two hours, laboratory three hours. 3 units.

**106. Psycho-Social Aspects of Physical Disability.** Examines the psychological and social impact of and reactions to illness and physical disability. Explores fundamental elements of the psycho-social dynamics related to disability with a focus on adjustments required of both the disabled and the provider. Investigation of social, cultural, personal, sexual, and familial factors which impact comprehensive rehabilitation in the clinical setting. Students will examine strategies and approaches to addressing reactions to these factors. Attention to interpersonal relationships and interactions among patients, family, health care providers, and society at large. Emphasis on illness and physical disability during the geriatric portion of the life span. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**107A. Clinical Assessment and Patient Management I.** The focus of this course will be on the acquisition and integration of knowledge and skills involved in developing and implementing a treatment plan for orthopedic patients based on sound evaluative findings. Lectures will address the issues of etiology, pathokinesiology, surgical, medical and pharmacological

management, and signs and symptoms of musculoskeletal dysfunction. Cardiopulmonary evaluation and treatment as related to the orthopedic patient will also be addressed. Lectures will also emphasize the development of problem solving in the context of the diagnosis and management of musculoskeletal conditions. Laboratory sessions will emphasize skill development for performing evaluation and treatment techniques safely and effectively. This course is the first of three. It will concentrate on principles of physical therapy management of the orthopedic patient, and will also introduce the student to the orthopedic physical therapy management of lower extremity dysfunction. Open to Physical Therapy majors only. Lecture two hours, laboratory six hours. 4 units.

**107B. Clinical Assessment and Patient Management II.** The focus of this course will be on the acquisition and integration of knowledge and skills involved in developing and implementing a treatment plan for orthopedic patients based on sound evaluative findings. Lectures will address the issues of etiology, pathokinesiology, surgical, medical and pharmacological management, and signs and symptoms of musculoskeletal dysfunction. Cardiopulmonary evaluation and treatment as related to the orthopedic patient will also be addressed. Lectures will also emphasize the development of problem solving in the context of the diagnosis and management of musculoskeletal conditions. Laboratory sessions will emphasize skill development for performing evaluation and treatment techniques safely and effectively. This course is the second of three. It will concentrate on principles of physical therapy management of the orthopedic patient, and will also introduce the student to the orthopedic physical therapy management of upper extremity and spinal dysfunction. Open to Physical Therapy majors only. Lecture three hours, laboratory six hours. 5 units.

**107C. Clinical Assessment and Patient Management III.** The third part of a three course series. This course provides an overview of the pathophysiology of common neurologic disorders in adults and children. Emphasis is on the development of evaluation and treatment skills for neurologic disorders in the adult and pediatric patients. Open to Physical Therapy majors only. Lecture three hours, laboratory six hours. 5 units.

**108. Therapeutic Agents.** Builds on theory and neuro-biology of pain and nerve conduction introduced in BIO 135. Basic theory, demonstration, and laboratory practice in physical therapy modalities and techniques including thermal agents, hydrotherapy, ultrasound, ultraviolet and diathermy. Review of the theory and rationale of employing specific techniques and instrumentation. Theory, demonstration and practice of functional neuromuscular electrical stimulation, ultrasound/stimulation combination, iontophoresis, TENS, and clinical electrophysiologic testing; EMG as an evaluative and treatment tool. Emphasizes the specific application of electro-physiological agents and techniques. Open to Physical Therapy majors only. Laboratory six hours. 2 units.

**109A. Research Methods I.** Designed to build on students' prerequisite coursework in statistics. Emphasizes basic research design and statistical procedures, and problem solving skills as related to understanding and designing research projects. Satisfies part of the Advanced Study graduation requirement for which the Writing Proficiency Examination (WPE) is a prerequisite. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**109B. Research Methods II.** Completion of a written project. Completes the Advanced Study graduation requirement for which the Writing Proficiency Examination (WPE) is a prerequisite. Open to Physical Therapy majors only. 2 units.

**110A. Clinical Education I.** In preparation for their first supervised clinical affiliation students are introduced to the concept of professionalism, professional values vs. personal values, and the values that form ethical and sensitive professional caregiving. Students are presented with theories of learning and teaching methods and practice skills needed to function as effective teachers in the clinical setting. Students are instructed in basic medical terminology and practice medical record review, documentation and note-writing, patient and family interview skills, the use of the BLUE MACS, and introduced to teamwork and collaborative practice. Each student then spends two full-time weeks in a clinical setting under the supervision of a licensed physical therapist. Open to Physical Therapy majors only. Lecture one hour. Two full-time weeks in clinical setting. 2 units.

**110B. Clinical Education II.** 80 hours of supervised clinical physical therapy experiences offered in a variety of settings. Clinical experiences will include opportunities for exposure to provision of health care along a continuum and in non-traditional settings. Clinical integration of academic knowledge and learned skills is emphasized for key areas approved, coordinated and communicated by the Academic Coordinator of Clinical Education. Open to Physical Therapy majors only. Two full-time weeks in clinical setting. 1 unit.

**110C. Clinical Education III.** This component of the PT 110 clinical series of the curriculum, totals 80 hours of full-time clinical education per student offered in multiple clinical settings. Students improve and refine evaluative and treatment abilities developed during PT 110A and PT 110B and integrate knowledge and skills gained throughout the Physical Therapy curriculum. Open to Physical Therapy majors only. Two full-time weeks in clinical setting. 1 unit.

**111. Topics in Physical Therapy.** Presentation of selected diagnostic and treatment topics used in physical therapy. Topics include Prosthetics and Orthotics, Burn Therapy and Wound Healing. Open to Physical Therapy majors only. Lecture one hour, laboratory three hours. 2 units.

**112. Geriatrics.** Presentation of normal and pathological changes associated with aging. Emphasis on the unique set of evaluative, management, and therapeutic procedures that apply to the delivery of care to the elderly population. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**113. Human Movement Science.** Human movement science presents contemporary concepts of motor control as applied to physical therapy programs for patients with neurologic, pediatric or orthopedic conditions. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**114. Advanced Assessment and Clinical Screening.** Advanced assessment techniques emphasizing differential diagnosis and clinical decision-making. Invited lectures by medical practitioners on specific signs and symptoms, prognosis and treatment of common systemic disorders. Open to Physical Therapy majors only. Lecture one hour. 1 unit.

**115A. Health Care Delivery I.** A survey course designed to give a historical overview of health care delivery and financing in the United States, the physical therapist's role in it, and the legal and ethical aspects of the practice of physical therapy. Students will be introduced to the continuum of care concept, be given an overview of national economic policy and the mechanisms for financing physical therapy services. Students will also study the California PT Practice Act and scope of practice regulations. Basic ethical concepts and established Standards of Practice will be introduced along with the Physical Therapy Examining Committee and the California Chapter of

the American Physical Therapy Association. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**115B. Health Care Delivery II.** A combination of survey course and seminars designed to give an overview of administrative topics in human resources, financial management, planning, and medical records management. The course will also include specific topics of current interest in health care delivery in a seminar format to include clinical techniques, background in related areas of practice or trends affecting the practice of physical therapy. Open to Physical Therapy majors only. Lecture two hours. 2 units.

**195. Physical Therapy Clinical Experience.** Supervised clinical affiliation equivalent to two full-time weeks up to six full-time weeks in a physical therapy setting under the direct supervision of a licensed Physical Therapist. Placement is arranged through the Program. Prerequisite: Permission of Clinical Coordinator. Open to Physical Therapy majors only. 1-3 units.

**199. Special Problems.** Individual projects or directed reading designed for students capable of independent study. Admission requires written approval of instructor and program director. Open to Physical Therapy majors only. 1-3 units.