## PHYSICAL THERAPY

College of Health and Human Services

## **Program Description**

The primary mission of the California State University, Sacramento Doctor of Physical Therapy program is to graduate knowledgeable, effective, adaptable, and reflective physical therapist generalist practitioners and health care leaders. Graduates demonstrate ethical, responsible, professional behavior, are sensitive to cultural and psychosocial differences, use evidence derived from the scientific and professional literature to inform independent judgments to meet patient needs and to advance the profession. They utilize critical and integrative thinking and problem-solving, practice lifelong learning, and provide services that contribute to the optimal health and function of community residents.

Physical Therapy at Sacramento State is one of several professional curricula in the College of Health and Human Services. The program complements others in the College and provides opportunities for scholarship, instructional collaboration, and interaction.

The doctoral curriculum of 3 years, including summers, encompasses didactic instruction, laboratory experience, and clinical education. The clinical component is thirty-six weeks of full-time, off-campus clinical experiences.

## **Degree Program**

Doctor of Physical Therapy (https://catalog.csus.edu/colleges/health-human-services/physical-therapy/doctor-of-physical-therapy/)

#### **Accreditation**

The Doctor of Physical Therapy Program at California State University, Sacramento is accredited by the Commission on Accreditation in Physical Therapy Education, (CAPTE) 3030 Potomac Ave., Suite 100, Alexandria, VA, 22305-3085; telephone: 703-706-3245; e-mail: accreditation@apta.org; website: www.capteonline.org. If you need to contact the program/institution directly, please call (916) 268-6426.

#### Notice to Students RE: Professional Licensure and Certification

California State University programs for professions that require licensure or certification are intended to prepare the student for California licensure and certification requirements. Admission into programs for professions that require licensure and certification does not guarantee that students will obtain a license or certificate. Licensure and certification requirements are set by agencies that are not controlled by or affiliated with the California State University and licensure and certification requirements can change at any time.

The California State University has not determined whether its programs meet other states' educational or professional requirements for licensure and certification. Students planning to pursue licensure or certification in other states are responsible for determining whether, if they complete a California State University program, they will meet their state's requirements for licensure or certification. This disclosure is made pursuant to 34 CFR §668.43(a)(5)(v)(C).

#### **Special Features**

 Following successful completion of both the clinical and regular academic program, students are awarded a Doctor of Physical Therapy and will be eligible to take the National Physical Therapy Licensure Examination.  The Doctor of Physical Therapy degree program at Sacramento State is fully accredited by the Commission on Accreditation in Physical Therapy Education/APTA. The Commission can be contacted for questions at:

1111 North Fairfax Street Alexandria, VA 22314-1488 (703) 684-2782

#### Notes:

- · Admission is for fall semester only.
- Classes are offered primarily during daytime hours, and full-time study is required.

## **Career Possibilities**

 $\label{lem:hospitals} \mbox{ \begin{tabular}{l} Hospitals \cdot Ambulatory Care Centers \cdot Private Practice \cdot Sports Medicine Centers \cdot Rehabilitation Centers \cdot Industries \cdot Extended Care Facilities \cdot Home Health Care \cdot Schools \cdot University Teaching and Research \cdot Consulting \\ \mbox{ \end{tabular}}$ 

### **Contact Information**

Irwin Scott Thompson, PT, MPT, EdD, Director
Mable Boban, Administrative Coordinator
Folsom Hall 1054
(916) 278-6426
Department of Physical Therapy Website (http://www.csus.edu/hhs/pt/)

## **Faculty**

COLEMAN-SALGADO, BRYAN

ESCAMILLA, RALPH

GARCIA, WILLIAM

GREEN, ERIN

LAZARO, ROLANDO

MacLEOD, TORAN

MATTERN-BAXTER, KATRIN

McKEOUGH, D. MICHAEL

MOORE, BRIAN

THOMPSON, IRWIN SCOTT

PT 280. Graduate PT Seminar II. Term Typically Offered: Fall, Spring 1 Unit

Presented after the final clinical field experience, will review students' experiences in the clinic and promote reflection on the professional practice of physical therapy. Serves as a review of a variety of physical therapy subjects in preparation for the licensure examination. Students will use computer interactive software to assist with preparation for this standardized national test format.

### Physical Therapy Clinical Experience.

Term Typically Offered: Fall, Spring

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.

Note: Placement is arranged through the Program. Permission of Clinical Coordinator required.

Credit/No Credit

#### PT 299. Special Problems.

1 - 3 Units

1 - 3 Units

Term Typically Offered: Fall, Spring

Individual projects or directed reading designed for students capable of independent study.

Note: Admission requires written approval of instructor and program director.

Credit/No Credit

#### PT 600. Pathokinesiology.

5 Units

Prerequisite(s): Open to Physical Therapy majors only. Corequisite(s): BIO 633, PT 602, PT 608, PT 630.

Term Typically Offered: Fall, Spring

This course will address functional anatomy, surface anatomy with palpation, arthrology, biomechanics, pathologies related to the musculoskeletal and nervous systems. Both normal motion and pathological motion will be addressed. Students will gain competence in surface anatomy and palpation skills.

#### PT 602. Evidence Informed Practice I.

3 Units

Prerequisite(s): Open to Physical Therapy majors only. Corequisite(s): BIO 633, PT 600, PT 608, PT 630.

Term Typically Offered: Fall, Spring

This course is designed to teach students to critically read and interpret the physical therapy scientific literature. Topics will include research design and statistical testing procedures commonly used in physical therapy. Students will review and critique current physical therapy articles utilizing the research designs and statistical testing procedures being studied.

#### PT 604. Principles of Human Movement.

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630. Corequisite(s): PT 606, PT 614, PT 618, PT 620, PT 622.

Term Typically Offered: Fall, Spring

This course focuses on developing an understanding of components of human movement under normal and pathological conditions. Content includes the American Physical Therapy Association Model of Practice, models of disablement, contemporary concepts of motor learning and motor control, task analysis, and theories of the recovery of function. The course includes a review of the foundations of neuroanatomy for normal movement.

Note: Open to Physical Therapy majors only.

#### PT 606. Therapeutic Measurements and Techniques.

4 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630. Corequisite(s): PT 604, PT 614, PT 618, PT 620, PT 622.

Term Typically Offered: Fall, Spring

In this course students acquire general physical therapy examination, evaluation and patient handling skills. Students will practice and demonstrate techniques under faculty supervision in the following areas: Measurement of vital signs, manual strength testing, testing of joint range of motion and muscle length, patient positioning, transfer techniques, gait training, use of wheelchairs, and use of assistive devices.

Note: Open to Physical Therapy majors only.

## PT 608. PT/Patient/Professional Interactions.

2 Units

Corequisite(s): BIO 633, PT 600, PT 602, PT 630.

Term Typically Offered: Fall, Spring

The course prepares physical therapy students to learn about themselves, others, and the environment in which they will interact with others as professionals. It addresses professionalism, self-awareness. communication, cultural competence, ethics, documentation, and endof-life care. This course assists students with transitioning into their professional roles.

Note: Graduate Writing Intensive (GWI) course that is part of the Writing Enriched Curriculum (WEC) of the program; open to Physical Therapy majors only

#### PT 614. Neuroscience for Physical Therapy.

3 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630. Corequisite(s): PT 604, PT 606, PT 618, PT 620, PT 622.

Term Typically Offered: Fall, Spring

This course is designed to prepare clinicians to better understand the neurological control of human behavior. A systems approach is used to examine the major anatomical and physiological principles and mechanisms by which the nervous system controls behavior under normal and pathological conditions. Because the course is being taught to health care professionals, clinical correlates of each system will also be presented. One class session is dedicated to presentation of human gross anatomical specimens.

#### Foundations for Patient Management.

1 Unit

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630. Corequisite(s): PT 604, PT 606, PT 614, PT 618, PT 620, PT 622.

Term Typically Offered: Fall, Spring

This course introduces the disablement model that forms the conceptual framework for understanding and organizing the practice of physical therapy. The model delineates the possible consequences of disease and injury for the person and society. The course goes on to identify how the model informs the five elements of patient management: Examination, Evaluation, Diagnosis, Prognosis (including Plan of Care), and Intervention. The course will further expand on professionalism introduced in PT 608.

#### PT 620. Physical Therapy Interventions I.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630. Corequisite(s): PT 604, PT 606, PT 614, PT 618, PT 622.

Term Typically Offered: Fall, Spring

In this course students learn, practice and demonstrate the clinical application of basic exercise regimes for the prevention of limitations, improvement of functional abilities and the treatment of disorders associated with the neuromuscular, skeletal and cardiopulmonary systems. In addition, the application of motor control principles to exercise and aquatic therapy are addressed.

Note: Open to Physical Therapy majors only.

#### PT 622. Evidence Informed Practice II.

Corequisite(s): PT 604, PT 606, PT 614, PT 618, PT 620.

Term Typically Offered: Fall, Spring

Designed to build upon the data analysis and research design topics covered in PT 602. Emphasis will be placed on evidence based methodologies currently used in the physical therapy literature evaluating the effectiveness of interventions, the validity of outcome measures, the validity of diagnostic measures, and the identification of prognostic measures.

Note: Open to Physical Therapy majors only. Prerquisite

### PT 624. Adult Neuromuscular Patient Management I. 4 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, PT 638.

**Corequisite(s):** PT 625, PT 626, PT 636, PT 640, PT 646.

Term Typically Offered: Fall, Spring

This course is first in a three course sequence focused on acquisition and integration of knowledge and skills needed to manage patients with movement dysfunction caused by neurological damage (Refered to in the Guide as Neuromuscular Practice Patterns). Focus is on development and implementation of plans of care based on sound evaluative, treatment and problem-solving skills.

Note: Open to Physical Therapy majors only.

#### PT 625. Musculoskeletal Patient Management I.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,

PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, PT 638. **Corequisite(s):** PT 624, PT 626, PT 636, PT 640, PT 646.

Term Typically Offered: Fall, Spring

This course, the first of three, focuses on acquisition, integration, knowledge and skills involved in developing and implementing a patient management plan for the patient with musculoskeletal dysfunction based on sound evaluative findings. Lectures address etiology, signs and symptoms, medical, surgical, and physical therapy management of musculoskeletal dysfunction. Labs address skill development for performing evaluation and interventions safely and effectively. The course addresses the management of lower extremity dysfunction. **Note:** Open to Physical Therapy majors only.

3 Units PT 626. Clinical Agents.

3 Units

4 Units

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, PT 638.

**Corequisite(s):** PT 624, PT 625, PT 636, PT 640, PT 646.

Term Typically Offered: Fall, Spring

This course presents theory, demonstration and laboratory practice in physical therapy modalities and techniques including thermal agents, hydrotherapy, ultrasound (US), ultraviolet, diathermy and massage. Theory, demonstration and practice using electrical modalities are included. Case studies will be utilized for decision making in the proper application of modalities based on current research evidence, knowledge of indications, contradictions and physiologic effects.

Note: Open to Physical Therapy majors only.

### PT 627. Physical Therapy Educator.

1 Unit

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634,

PT 636, PT 638, PT 640, PT 646.

Corequisite(s): PT 644, PT 645, PT 648, PT 662, PT 669.

Term Typically Offered: Fall, Spring

This course presents the role of the physical therapist as health educator. The course introduces teaching and learning theory, learning domains, the identification of learning styles, and teaching strategies to address different learner needs across the life-span. Students will practice instructional formats and prepare and analyze patient education materials. Students will practice applications of appropriate technology for the design of professional presentations. Self-assessment, reflection and peer-assessment are required course components.

Note: Open to Physical Therapy majors only.

#### PT 630. Pathophysiology.

3 Units

2 Units

**Prerequisite(s):** Admission to the Doctor of Physical Therapy Program.

Corequisite(s): BIO 633, PT 600, PT 602, PT 608.

Term Typically Offered: Fall, Spring

This course is designed to promote the understanding and application of fundamental disease processes in clinical settings. General concepts of disease, including etiology, pathogenesis, morphology, and clinical significance are discussed within the context of cases. General pathophysiology concepts include: cell injury, necrosis, inflammation, wound healing and neoplasia. These concepts are applied in a systems-orientated approach to disease processes affecting musculoskeletal, cardiopulmonary, renal, nervous, gastrointestinal, immune, hematological and endocrine systems.

#### PT 632. Pharmacology for Physical Therapists.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,

PT 618, PT 620, PT 622, PT 630. Corequisite(s): PT 634, PT 638. Term Typically Offered: Summer only

This course provides a study of pharmacological agents and their effects on the musculoskeletal, neuromuscular, cardiopulmonary and integumentary systems. Particular emphasis is placed on recognition of adverse reactions and side effects of various drugs as they affect patients receiving physical therapy.

#### PT 634. Diagnostic Imaging for Physical Therapy.

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 630.

Corequisite(s): PT 632, PT 638. Term Typically Offered: Fall, Spring

This course provides an overview of imaging techniques commonly used in radiology and their implications to the role of physical therapists in professional practice. The role of imaging techniques in the diagnostic and intervention-planning processes for physical therapists is presented. **Note:** Open to Physical Therapy Majors only.

PT 636. Geriatrics/Gerontology for Physical Therapists. 2 Units Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,

PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, PT 638. **Corequisite(s):** PT 624, PT 625, PT 626, PT 640, PT 646.

Term Typically Offered: Fall only

This course explores normal and pathological aging and the implications of both on Physical therapist practice. It will explore the ramifications of aging components of patient management interventions including major practice patterns: musculoskeletal, neuromuscular, cardiopulmonary, and integumentry. It will also explore how aging may impact patient teaching. **Note:** Open to Physical Therapy majors only.

PT 638. Health, Wellness and Ergonomics in Physical Therapy. 2 Units Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,

PT 618, PT 620, PT 622, PT 630. Corequisite(s): PT 632, PT 634. Term Typically Offered: Fall, Spring

This course presents basic philosophical, historical, psychological and scientific foundations in wellness; reviews cultural forces/theories that affect individuals and society, applies concepts of healthy lifestyle education to reach an understanding of the importance of wellness and to establish an effective and potentially fulfilling lifestyle.

Note: Open to Physical Therapy majors only.

PT 640. Physical Therapy Interventions II. 3 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, and PT 638.

**Corequisite(s):** PT 624, PT 625, PT 626, PT 636, PT 646

Term Typically Offered: Fall, Spring

This course is a continuation of Physical Therapy Interventions I. This course focuses on the presentation of selected topics in acute care and cardiopulmonary Physical Therapy. Students will learn how to perform appropriate and comprehensive examinations, interpret the examination findings as well as design and implement a plan of care based upon the next available evidence.

Note: Open to Physical Therapy majors only.

PT 644. Adult Neuromuscular Patient Management II. 4 Units Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634,

PT 636, PT 638, PT 640 and PT 646.

Corequisite(s): PT 627, PT 645, PT 648, PT 662, PT 669.

Term Typically Offered: Fall, Spring

This course is the second in a three course sequence focused on acquisition and integration of knowledge and skills needed to manage patients with movement dysfunctions caused by neurological damage (Referred to in the Guide as Neuromuscular Practice Patterns). Focus is on development and implementation of plans of care based on sound evaluative findings and evidence of efficacy. Case presentation, video demonstrations, and patient contact is used to develop evaluation, treatment and problem solving skills.

Note: Open to Physical Therapy majors only.

PT 645. Musculoskeletal Patient Management II. 4 Units
Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,
PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634,

PT 636, PT 638, PT 640 and PT 646.

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 662, PT 669.

Term Typically Offered: Fall, Spring

This course, the second of three, focuses on acquisition and integration of knowledge and skills involved in developing and implementing management plans for patients with musculoskeletal dysfunction from sound evaluative findings. Lectures address etiology, signs and symptoms, medical, surgical, and physical therapy management of musculoskeletal dysfunction. Labs address safe and effective evaluation and interventions, specifically joint mobilizations. Joint mobilizations will cover one technique per joint restriction. This course addresses upper extremity and spine dysfunction.

Note: Open to Physical Therapy majors only.

**PT 646.** Acute Care and Cardiopulmonary Physical Therapy. **2 Units Prerequisite(s):** BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614,
PT 618, PT 620, PT 622, PT 630, PT 632, PT 634, PT 636 and PT 638.

Corequisite(s): PT 624, PT 625, PT 626, PT 640.

Term Typically Offered: Fall, Spring

This course focuses on the presentation of selected topics in acute care and cardiopulmonary Physical Therapy. The course includes a discussion of common pathologies in the cardiopulmonary system and those associated with an acute care setting, as well as common medical tests, laboratory tests, surgical procedures and pharmacological interventions used with this patient population.

#### PT 648. Health Care Delivery in Physical Therapy I.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634,

PT 636, PT 638, PT 640 and PT 646.

Corequisite(s): PT 627, PT 644, PT 645, PT 662, PT 669.

Term Typically Offered: Fall, Spring

This course provides a historical overview of health care delivery and financing in the U.S., up to and including the current effects on the delivery of physical therapy care. The continuum of care concept, an overview of national economic policy and the mechanisms for financing physical therapy services will be presented. Administrative topics including human resources, financial management, planning, marketing, patient's rights, and medical records management will be covered. Note: Open to Physical Therapy majors only.

PT 660A. Graduate Physical Therapy Seminar A: Research. Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630

Term Typically Offered: Fall, Spring, Summer

This seminar is the first designed for advanced study and mentoring in physical therapy research. Students will be participating in facultydirected research projects. Students' activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least 50 hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected seminars in the curriculum.

PT 660B. Graduate Physical Therapy Seminar B: Research. Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630

Term Typically Offered: Fall, Spring, Summer

This seminar is the second designed for advanced study and mentoring in physical therapy research. Students will be participating in facultydirected research projects. Students' activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least fifty hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected seminars in the DPT curriculum. Note: Open to Physical Therapy majors only.

PT 660C. Graduate Physical Therapy Seminar C: Research. 1 Unit Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630

Term Typically Offered: Fall, Spring, Summer

This seminar is the third designed for advanced study and mentoring in physical therapy research. Students will be participating in faculty directed research projects. Students' activities will vary depending on the faculty member and research project being conducted. Students are required to perform at least 50 hours of activities toward the directed research project to receive credit for this course. This course satisfies one of two requirements for selected in the DPT curriculum.

Note: Open to Physical Therapy majors only.

Graduate Physical Therapy Seminar ID: Electrotherapeutics.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 646.

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 662, PT 669.

Term Typically Offered: Fall, Spring

This is a seminar laboratory experience focusing on electrophysiology and electrodiagnostics in physical therapy. The lab will allow students to research and apply evidence-based practice and gain advanced hands-on practice in performing and interpreting the results of electromyographic and nerve conduction velocity testing with clients. This course satisfies one of two requirements for selected seminars in the curriculum. Note: Open to Physical Therapy majors only.

PT 660E. Graduate Physical Therapy Seminar IE: NeuroPediatric

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 669.

Corequisite(s): PT 663, PT 664, PT 665, PT 668, PT 680, PT 690.

Term Typically Offered: Fall, Spring

1 Unit

1 Unit

Laboratory.

This seminar laboratory experience focuses on pediatric patient management. The lab will allow students to research and apply evidencebased practice and gain advanced hands-on practice in pediatric physical therapy. This course is best suited for students planning a career in pediatric patient management. The course satisfies one of two requirements for selected seminars in the curriculum.

Note: Open to Physical Therapy majors only.

PT 660F. Graduate Physical Therapy Seminar IF. Adult Neuromuscular Laboratory.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 646, PT 644, PT 645, PT 648, PT 662, PT 669.

Corequisite(s): PT 663, PT 664, PT 665, PT 668, PT 680, PT 690.

Term Typically Offered: Fall, Spring

This seminar laboratory experience focuses on adult neuromuscular patient management. The laboratory will allow students to research and apply evidence-based practice and gain advanced hands-on practice in adult neurorehabilitation. Students will also serve as mentors for the Mock Clinic portion of PT 624. This course satisfies one of two requirements for selected seminars in the curriculum.

#### PT 660G. Certified Strength and Conditioning Specialist (CSCS).

2 Units

1 Unit

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 669.

Corequisite(s): PT 663, PT 664, PT 665, PT 668

Term Typically Offered: Fall, Spring

This seminar is designed to prepare students to take the Certified Strength and Conditioning Specialist Examination. The seminar covers the topics of excercise physiology, bioenergetics, nutritional factors in performance, resistance, speed, and agility training, endocrine responses to resistance training, exercise testing, and other training considerations. This course satisfies one of two requirements for selected seminars in the curriculum.

Note: Open to Physical Therapy majors only.

# PT 660H. Graduate Physical Therapy Seminar H: Cardiovascular Wellness Clinic Experience.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 669. This elective provides mentored clinical experience for students in the area of cardiovascular well ness. The student will design and implement an evaluation of a volunteer client in a cardiovascular well ness program, develop an individualized plan of care, and monitor the impact of the intervention. A written comprehensive case report will analyze the impact of the interventions on the cardiovascular well ness of the client.

Note: Open to Physical Therapy majors only.

# PT 660J. Graduate Physical Therapy Seminar IJ: Adv. Biomechanics I. 2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630, PT 604, PT 606, PT 614, PT 618, PT 620, PT 622, PT 632, PT 634, PT 638

Corequisite(s): PT 624, PT 625, PT 626, PT 636, PT 640, PT 646

Term Typically Offered: Fall, Spring

This elective is designed to prepare students to run a gait analysis clinic. The course covers the topics of assessment of balance, lower extremity strength assessment, special tests, and running analysis from both the research ¿gold standard¿ as well as the clinically feasible perspective with a particular focus on running. This course satisfies one of two requirements for selected electives in the curriculum. (Fall Semester Only)

Note: Open to Physical Therapy majors only.

## PT 660K. Graduate Physical Therapy Seminar 1K Adv. Biomechanics II.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630, PT 604, PT 606, PT 614, PT 618, PT 620, PT 622, PT 632, PT 634, PT 636, PT 638, PT 624, PT 625, PT 626, PT 640, PT 696J

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 669, PT 662
This elective is designed to prepare students to run a gait analysis clime in the biomechanics laboratory. The course is one unit of lecture and one unit of lab, and covers the topics of assessment of balance, lower extremity strength assessment, special tests, and running analysis from both the research "gold standard" as well as the clinically feasible perspective with a particular focus on running.

#### PT 662. Differential Diagnosis in Physical Therapy.

3 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634, PT 630, PT 6

PT 636, PT 638, PT 640 and PT 646.

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 669.

Term Typically Offered: Fall, Spring

This course focuses on learning and practicing screening techniques for physical therapists to detect medical or other problems for which a referral to a medical doctor or another health care provider is indicated. Students will learn to screen patients for dysfunction in a variety of physiological systems by taking medical history, medication history, performing a risk factor assessment and manual examination, and screening various physiological systems.

Note: Open to Physical Therapy majors only.

#### PT 663. Integumentary Patient Management.

2 Units

Prerequisite(s): BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638, 640, 644, 645, 646, 648, 662, 669 and 695A.

Corequisite(s): PT 664, PT 665, PT 668, PT 680, PT 690.

Term Typically Offered: Fall, Spring

This course focuses on the management of patients with integumentary impairments and their related sequelae. Topics include post-surgical management of patients with amputations, prosthetics, and management of the patient with a wound or burn injury. Lecture, case presesentation, video demonstrations, and laboratory activities will be used to develop patient management skills.

Note: Open to Physical Therapy majors only.

#### PT 664. Neuropediatric Patient Management.

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 669 and PT 695A.

Corequisite(s): PT 663, PT 665, PT, 668, PT 680, PT 690.

Term Typically Offered: Fall, Spring

This course is the third part of a three course series focusing on the acquisition and integration of knowledge and skills involved in developing and implementing a treatment plan based on sound evaluative findings for the patient with neurological dysfunction. In this course, the focus is on the pediatric patient with neurological dysfunction. Case presentation, video demonstrations, and actual patient contact will be used to develop evaluation, treatment, and problem-solving skills.

#### PT 665. Musculoskeletal Patient Management III.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 669, PT 695A. Corequiste: PT 663, PT 664, PT 668, PT 690.

Term Typically Offered: Fall, Spring

This course builds on the foundational intervention techniques established for management of the patient with musculoskeletal dysfunction in PT 625 and PT 645. It will address additional manual therapy skills and students will apply their developing skills under faculty supervision to patients referred from the Student Health Center. Students will be responsible for patient management of a case load including accurate documentation and submission of patient records to the Student Health Center.

Note: Open to Physical Therapy Majors only.

#### PT 668. Health Care Delivery in Physical Therapy II.

Prerequisite(s): BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638, 640, 644, 645, 646, 648, 662, 669 and 695A.

Corequisite(s): PT 663, PT 664, PT 665, PT 680, PT 690.

Term Typically Offered: Fall, Spring

In this course, students will have professional practice behavior expectations and requirements previously introduced in other courses reinforced through the review of the American Physical Therapy Association documents: the Standard of Practice for Physical Therapy and the Code of Ethics, as well as the State of California's Physical Therapy Practice Act. Additionally, students will hear from other health care professionals on their expectations of the physical therapist's role on a health care team.

Note: Open to Physical Therapy majors only.

#### PT 669. Psychosocial Issues in Physical Therapy.

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640 and PT 646.

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 662.

Term Typically Offered: Fall, Spring

This course examines psychological and social impact of and reactions to illness and physical disability. Explores elements of the psycho-social dynamics related to disability with a focus on adjustments required of the disabled and the provider. The course addresses social, cultural, personal, and familial factors which impact comprehensive rehabilitation in the clinical setting. Attention will be placed on interpersonal relationships between patients, family, health care providers, and society.

Note: Open to Physical Therapy majors only.

#### PT 680. Graduate Physical Therapy Seminar II.

1 Unit

Prerequisite(s): BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638, 640, 644, 645, 646, 648, 662 and 669.

Corequisite(s): PT 663, PT 664, PT 665, PT 668, PT 690.

Term Typically Offered: Fall, Spring

This course, presented just prior to the final clinical internships, will review student's experiences in the curriculum and promote reflection on the professional practice of physical therapy. The course will review professional core values and expectations for clinical internships. The course will also review portfolio requirements to determine students' readiness to proceed into final internships. In addition, students will be expected to develop five year personal professional development plans. **Note:** Open to Physical Therapy majors only.

#### PT 689. Doctoral Project Proposal.

1 Unit

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 630, PT 632, PT 634, PT 636, PT 638, PT 640, and PT 646

**Corequisite(s)**: PT 627, PT 644, PT 645, PT 648, PT 662, and PT 669

Term Typically Offered: Spring only

The Doctoral Project Proposal must demonstrate students' understanding of the application of current evidence-based practice to physical therapist practice in a multicultural and complex health care environment. The case report proposal and oral defense are the final requirements for Advancement to Candidacy in the Doctor of Physical Therapy program. The 3000-word minimum case report completes the Writing Enriched Curriculum began in PT608 for fulfilling the Graduate Writing Assessment Requirement (GWAR) in the DPT program.

Note: Graduate Writing Intensive (GWI) course that is part of the Writing Enriched Curriculum (WEC) of the program; Open to Physical Therapy Majors only.

Credit/No Credit

2 Units

1 Unit

#### PT 690. Doctoral Project/Culminating Experience.

3 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 604, PT 606, PT 608, PT 614, PT 618, PT 620, PT 622, PT 624, PT 625, PT 626, PT 627, PT 630, PT 632, PT 634, PT636, PT 638, PT 640, PT 644, PT 645, PT 646, PT 648, PT 662, PT 663, PT 664, PT665, PT 668, PT 669, PT 680, and PT 695A

Term Typically Offered: Fall, Spring

The Doctoral Project/Culminating Experience may include evidence-based practice projects, clinical research projects, or case reports consistent with the Chancellor's Office Executive Order. Culminating events must demonstrate students' understandings of the application of current evidence-based practice in a multicultural and complex health care environment. They must be of sufficient rigor to ensure students' demonstrations of critical and independent thinking and abilities to interpret the research literature and apply to current physical therapist practice.

#### PT 695A. Clinical Experience I.

6 Units

Prerequisite(s): BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638,640, 644, 645, 646, 648, 669 and 689.

Term Typically Offered: Fall, Spring, Summer

The first full-time clinical experience in the Doctor of Physical Therapy (DPT) program curriculum totals 12 weeks of clinical education in an assigned clinical setting under the direct supervision of a licensed physical therapist. Students improve and refine evaluation and treatment abilities developed during their first two academic years and integrate knowledge and skills in a selected variety of clinical settings.

Note: Open to Physical Therapy majors only who have successfully completed the first five semester of the DPT curriculum.

#### Credit/No Credit

#### PT 695B. Clinical Experience II.

6 Units

**Prerequisite(s):** BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638, 640, 644, 645, 646, 648, 669, 689, 663, 664, 665, 668, 690 and 695A.

Term Typically Offered: Fall, Spring, Summer

The second full-time clinical education experience in the Doctor of Physical therapy (DPT) program curriculum totals 12 weeks of clinical education in an assigned clinical setting under the direct supervision of a licensed physical therapist. Students improve and refine patient management skills and abilities developed during their first seven semesters.

**Note:** Open to Physical Therapy majors only who have successfully completed the first seven semesters of the DPT curriculum.

#### Credit/No Credit

#### PT 695C. Clinical Experience III.

6 Units

Prerequisite(s): BIO 633, PT 600, 602, 604, 606, 608, 614, 618, 620, 622, 624, 625, 626, 627, 630, 632, 634, 636, 638, 640, 644, 645, 646, 648, 669, 689, 663, 664, 665, 668, 690, 695A, and 695B.

Term Typically Offered: Fall, Spring, Summer

The third full-time clinical education experience in the Doctor of Physical therapy (DPT) program curriculum totals 12 weeks of clinical education in an assigned clinical setting under the direct supervision of a licensed physical therapist. Students improve and refine patient management skills and abilities developed during their first eight semesters.

Notes: Open to Physical Therapy majors only who have successfully completed the first eight semesters of the DPT curriculum.

#### Credit/No Credit

#### PT 696J. Graduate Physical Therapy Seminar IJ Adv. Biomechanics I.

2 Units

Prerequisite(s): BIO 633, PT 600, PT 602, PT 608, PT 630, PT 604, PT 606, PT 614, PT 618, PT 620, PT 622, PT 632, PT 634, PT 636, PT 638, PT 624, PT 625, PT 626, PT 640, and PT 646

Corequisite(s): PT 627, PT 644, PT 645, PT 648, PT 669, and PT 662 This elective is designed to prepare students to run a gait analysis clinic in the biomechanics laboratory. The course is one unit of lecture and one unit of lab, and covers the topics of assessment of balance, lower extremity strength assessment, special tests, and running analysis from both the research "gold standard" as well as the clinically feasible perspective with a particular focus on running.

Note: Fall semester only