PHYSICAL THERAPIST ASSISTANT — A.S.

Program director
R. Jeremy Hubbard

Director of clinical education
Jennifer Rae Rubio

Advisory committee
Leo Adorador
Kristine Amouzandeh
Brandi Bolanos
Dillon Chang
Anna Elkins
Amber Harrell
Eugene Martinez
Steven Snitzer

The physical therapist assistant (PTA) is a skilled paraprofessional health-care provider who implements the plan of care for patients under the direction and supervision of a licensed physical therapist. Following established procedures, the PTA may train patients in exercises and activities of normal daily living; perform treatment interventions; utilize special equipment; assist in performing tests, data collection, and complex treatment procedures; and observe and document the patient’s responses.

Physical therapists and PTAs may serve as part of a rehabilitation team—including occupational therapists, nurses, speech and hearing therapists, respiratory therapists, recreational therapists, physicians, social workers, chaplains, vocational counselors, dietitians, and psychologists. This team has as its objective the optimum functional restoration and rehabilitation of patients disabled by illness or injury.

The program
The Physical Therapist Assistant Program, a 15-month curriculum which begins with the sophomore year, leads to the Associate in Science degree and professional licensure. Instruction begins in June, and students participate in graduation ceremonies the following June. Program completion occurs when clinical performance requirements are met—typically by the end of September.

Clinical learning experiences
The program includes supervised, one-on-one clinical instruction across the human life span in a variety of settings, including acute and sub-acute inpatient facilities and outpatient clinics. Students complete three six-week, full-time clinical experiences, all coordinated and monitored by the director of clinical education or the program director. Although the program makes an effort to accommodate each student’s preference, students agree to accept clinical assignments made by the program at any of the affiliated facilities, whether local or out of state. Because of the limited number of local facilities available, assignments cannot be made on the basis of the student’s family/marital status or personal preference.

Transportation
Students are required to have their own transportation to and from clinical sites.

CPR certification
Students are required to hold current certification in adult, child, and infant cardiopulmonary resuscitation (CPR) during all scheduled clinical experiences. Basic life-support CPR certification for health-care providers must be completed via the American Heart Association. Certification may be completed prior to beginning the program of study or may be obtained at Loma Linda University. Classes are available on campus at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102, Loma Linda, California.

Professional licensing
Satisfactory completion of all degree requirements, including all clinical experience courses, will qualify the graduate for the National Physical Therapy Examination (NPTE) for physical therapist assistants. State licensure or certification is required to practice as a PTA in all 50 states and in the District of Columbia. Information about licensing or certification is found online at http://www.apta.org/licensure (http://www.apta.org/licensure/).

Professional association
Students and graduates are eligible for membership in the American Physical Therapy Association which fosters the development and improvement of physical therapy services and education. The organization grants student membership at a reduced cost to undergraduates of approved schools. The student is required to become a member of this association while in the program. The national office of the American Physical Therapy Association is at 1111 North Fairfax Street, Alexandria, VA 22314.

Program philosophy statement
In accordance with the motto of Loma Linda University, "To make man whole," and the mission of the School of Allied Health Professions, "To continue the teaching and healing ministry of Jesus Christ," the program is committed to the highest development of the physical, emotional, mental, and spiritual capacities of its faculty and students. Promoting wholeness constitutes a caring commitment to the well-being of others, to students, and to program personnel; to active engagement in the advancement of the profession; and to a living consecration to God. Students in this program will have opportunities to develop a commitment to excellence in service for others and their profession as well as to develop a biblically informed faith and a commitment to lifelong spiritual growth.

Program mission
The Physical Therapist Assistant Program affirms the mission and values of Loma Linda University and the School of Allied Health Professions by providing an educational program that prepares physical therapist assistants with balanced intellectual development, social skills, competent practice, and spiritual connection.

Program goals
In order to achieve the mission of the Physical Therapist Assistant Program, the program goals are to:

1. Provide adequate space, equipment, and resources in an appropriate learning environment for the technical portion of physical therapist assistant education;
2. Provide opportunities for graduates to practice the concept of wholeness in terms of physical, mental, and spiritual concerns when addressing the needs of the patient/client;
3. Maintain compliance with the Standards and Required Elements for accreditation of PTA educational programs, published by the Commission on Accreditation in Physical Therapy Education.

Program learning outcomes

Upon program completion, the graduate should be able to:

1. Demonstrate entry-level knowledge and skills appropriate for safe practice as a physical therapist assistant with effective clinical reasoning and lifelong-learning skills.
2. Provide physical therapy interventions and services under the direction and supervision of licensed physical therapists in a variety of settings.
3. Exhibit ethical behavior consistent with legal and professional standards when interacting with instructors, classmates, patients/clients and family members, and clinical personnel, including compassionate respect for differences.
4. Demonstrate consideration of the close interrelationship of physical, mental, and spiritual concerns when addressing the needs of patients/clients and others.

Accreditation

The Physical Therapist Assistant Program at Loma Linda University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Avenue, Suite 100, Alexandria, VA 22305-3085; 800/999-2782; email: accreditation@apta.org; website: http://www.capteonline.org. (http://www.capteonline.org/) If needing to contact the program/institution directly, please call 909/558-4634 or email studypta@llu.edu (jmendes@llu.edu).

Admissions

Admission is based on a selective process. In addition to Loma Linda University (http://llucatalog.llu.edu/about-university/admission-policies-information/#admissionrequirementstext) and School of Allied Health Professions admissions requirements (http://llucatalog.llu.edu/allied-health-professions/#generalregulationstext), the applicant must also complete the following requirements:

• a minimum G.P.A. of 2.50 in the three basic science prerequisite courses and a minimum G.P.A. of 2.50 in the remaining non-science prerequisite courses
• transfer of prerequisite courses from an accredited college or university. Note: Grades below C (2.0) are not transferable for credit.
• a personal interview
• a writing assessment done at the time of the interview
• documentation of work or observation experience; specifically, at least 20 hours of work or observation in an inpatient physical therapy setting and at least 20 hours in an outpatient physical therapy setting, plus additional work/observation hours in either an inpatient or an outpatient physical therapy setting for a minimum total of 80 hours.

Prerequisites

All prerequisite courses must be completed prior to entering the program. An application for admission may be submitted while some coursework is in progress if the student expects to complete the required coursework before the program begins. Individuals who have earned a bachelor’s degree from an accredited college or university need to complete only the courses denoted with an asterisk (*):

Humanities: Four units from one of the topics listed; history, literature, philosophy, foreign language, art/music appreciation/ history

*Human anatomy and physiology, complete sequence with laboratory components (preferred); or general biology, complete sequence with laboratory components (accepted)
*Introductory physics with laboratory component, one quarter/semester
*Two years high school mathematics with grades C or above, or intermediate algebra in college or a college statistics course
*General psychology
*Human growth and development or developmental psychology or abnormal psychology

English composition, complete sequence

*Speech (preferred) or interpersonal communication (accepted)

Personal health/nutrition, or two physical education/activity courses

*Medical terminology

If needed, elective courses may be taken to meet the minimum total requirements of 48 quarter units or 32 semester units.

Program requirements

Sophomore

Summer Quarter 1

| Units |
|---|---|
| PTAS 201 | Anatomy |
| PTAS 205 | Introduction to Physical Therapy |
| PTAS 206 | Documentation Skills |
| PTAS 212 | Physical Therapy Procedures |
| PTAS 229 | Physical Therapy Biophysical Agents |
| PTAS 265 | Professional Seminar |
| PTAS 275 | Psychosocial Aspects of Health |
| RELE 257 | Health Care Ethics |

Autumn Quarter

| Units |
|---|---|
| AHCJ 305 | Infectious Disease and the Health-Care Provider |
| PTAS 203 | Applied Kinesiology |
| PTAS 204 | Applied Gait |
| PTAS 224 | General Medicine I |
| PTAS 225 | Neurology |
| PTAS 227 | Therapeutic Exercise |
| PTAS 264 | Applied Orthotics and Prosthetics |
| PTAS 265 | Professional Seminar |

Winter Quarter

| Units |
|---|---|
| PTAS 226 | Orthopaedics I |
| PTAS 234 | General Medicine II |
| PTAS 236 | Applied Electrotherapy |
| PTAS 238 | Wound Care |
| PTAS 243 | Applied Geriatrics |
| PTAS 252 | Applied Neurology |
| PTAS 265 | Professional Seminar |
| RELR 275 | Whole Person Care |

Spring Quarter

| Units |
|---|---|
| PTAS 241 | Applied Pediatrics |
| PTAS 251 | Orthopaedics II |
| PTAS 261 | Physical Therapy Practice |
PTAS 265 1 Professional Seminar 1
PTAS 293 Physical Therapist Assistant Clinical Experience I 6
Summer Quarter 2
PTAS 294 Physical Therapist Assistant Clinical Experience II 6
PTAS 295 Physical Therapist Assistant Clinical Experience III 6

Total Units: 72

1 Fulfills service learning requirement

A minimum grade of C (2.0) is required for all courses in the program.

**Normal time to complete the program**

1.33 years (Five [5] academic quarters) at LLU — full-time enrollment typical; half-time enrollment (3.25 years) by permission only

**Courses**

PTAS 201. Anatomy. 4 Units.
Anatomy of the human body, with emphasis on the neuromuscular and skeletal systems, including anatomical landmarks. Basic neuroanatomy of the central nervous system.

PTAS 203. Applied Kinesiology. 3 Units.
Introduces functional anatomy of the musculoskeletal system. Applies biomechanics of normal and abnormal movement in the human body. Lecture and laboratory.

PTAS 204. Applied Gait. 1 Unit.
Introduces normal phases of gait. Identifies common gait abnormalities. Clinical application towards therapeutic exercises and gait training. Lecture and laboratory.

PTAS 205. Introduction to Physical Therapy. 1 Unit.
Physical therapy practice and the role of the physical therapist assistant in providing patient care. Quality assurance. Interpersonal skills. Introduces the multidisciplinary approach. Familiarizes the student with health care facilities and government agencies.

PTAS 206. Documentation Skills. 1 Unit.
Introduces basic abbreviations, medical terminology, chart reading, and note writing.

PTAS 212. Physical Therapy Procedures. 3 Units.
Principles of basic skills in the physical therapy setting. Goniometry. Sensory- and gross-muscle testing. Mobility skills in bed and wheelchair and transfer training. Gait training and activities of daily living. Body mechanics, positioning, and vital signs. Identifies architectural barriers. Teaching techniques for other health care providers, patients, and families. Wheelchair measurement and maintenance. Lecture and laboratory.

PTAS 224. General Medicine I. 3 Units.
Introduces general medical conditions, including pathology and management of medical problems: diseases of the body systems— including cardiovascular, urinary, digestive, nervous, endocrine, and musculoskeletal systems. Theoretical principles and practical application of respiratory techniques, exercises, and postural drainage. CPR certification required prior to the end of the term. Prerequisite: PTAS 201.

PTAS 225. Neurology. 3 Units.
Introduces neurological conditions, including pathology and management of medical problems of stroke, head injury, Parkinson’s disease, spinal cord and nerve injuries, and other conditions.

PTAS 226. Orthopaedics I. 3 Units.
Introduces common orthopaedic conditions, pathologies, and surgical procedures involving the peripheral joints. Introduces joint mobilization. Procedures and progression of therapeutic exercises for each specific joint covered as these exercises relate to tissue repair and healing response. Practical laboratory includes integration of treatment plans and progressions.

PTAS 227. Therapeutic Exercise. 2 Units.
Introduces therapeutic exercise theories and practical applications. Tissue response to range of motion, stretch, and resistive exercise. Laboratory covers practical applications of various types of exercise techniques and machines used in the clinics, and a systematic approach to therapeutic exercise progression.

PTAS 229. Physical Therapy Biophysical Agents. 2 Units.
Introduces administration and practice of physical therapy biophysical agents, including heat and cold applications, hydrotherapy, massage, aquatic therapy, physiotherapy and control of edema, standard precautions, sterilization techniques, and pain management. Includes lecture and laboratory.

PTAS 234. General Medicine II. 2 Units.
Introduces techniques and procedures for interventions in acute/inpatient settings by the physical therapist assistant. Mobilization, functional mobility, exercise, and transfers within the acute care setting. Identifies the roles of multidisciplinary team members managing critical care patients. Prerequisite: PTAS 212, PTAS 224.

PTAS 236. Applied Electrotherapy. 3 Units.
Principles and techniques of electrotherapy procedures, including basic physiological effects. Indications and contraindications for specific electrotherapy modalities. Practical application and demonstration of modalities in a laboratory setting.

PTAS 238. Wound Care. 1 Unit.
Normal structure and function of the skin. Pathology of the skin, including problem conditions, burns, and wounds. Lecture and laboratory to include wound identification, measuring, dressing, treatments, and debridement. Model wounds used for hands-on training.

PTAS 241. Applied Pediatrics. 2 Units.
Normal and abnormal development, from conception to adolescence. Emphasizes developmental sequence, testing, and treatment of neurological and orthopaedic disorders. Practical laboratory.

PTAS 243. Applied Geriatrics. 3 Units.
Introduces various aspects of geriatric care. Wellness care and adaptation to exercise modalities. Procedures pertaining to the geriatric patient. Diagnosis and aging changes that affect function in geriatric rehabilitation.

PTAS 251. Orthopaedics II. 3 Units.
Introduces common orthopaedic conditions, pathologies, and surgical procedures of the spine. Treatments, procedures, and progression of therapeutic exercises of the spine as related to tissue repair and healing response. Practical laboratory includes integration of treatment plans and progressions.

PTAS 252. Applied Neurology. 3 Units.
Introduces techniques to facilitate neurodevelopmental treatment, proprioceptive neuromuscular facilitation, Brunnstrom, and principles of therapeutic exercise of the cardiac patient. Practical laboratory.
PTAS 261. Physical Therapy Practice. 1 Unit.
Student observes evaluations, treatments, and various diagnoses; completes a resume and a state licensing application; and prepares and presents a case study and in-service. Billing procedures and third-party payors.

PTAS 264. Applied Orthotics and Prosthetics. 2 Units.
Introduces basic principles in the use of selected prosthetic and orthotic devices. Exposes student to various types of devices; discusses patient adjustment to devices. Examines indications and contraindications for orthotic and prosthetic use with patients seen in physical therapy.
Prerequisite: PTAS 203.

PTAS 265. Professional Seminar. 1 Unit.
Contemporary theories and practices of physical therapy. Topics covered by faculty and guest lecturers include: sports taping, ortho taping, soft tissue, geriatric experience through affective learning, and vestibular rehabilitation. Lecture and laboratory.

PTAS 275. Psychosocial Aspects of Health. 2 Units.
Psychological and sociological reactions to illness or disability. Includes trauma, surgery, and congenital and terminal illness. Individual and family considerations.

PTAS 293. Physical Therapist Assistant Clinical Experience I. 6 Units.
One six-week assignment to be completed during the Spring Quarter. Students exposed to a variety of clinical settings. Forty clock hours per week of supervised clinical experience. Combined total of eighteen weeks—including PTAS 293, 294, 295—of clinical experience prepares the student for entry-level performance.

PTAS 294. Physical Therapist Assistant Clinical Experience II. 6 Units.
One six-week assignment to be completed during the Summer Quarter. Students exposed to a variety of clinical settings. Forty clock hours per week of supervised clinical experience. Combined total of eighteen weeks—including PTAS 293, 294, 295—of clinical experience prepares the student for entry-level performance.

PTAS 295. Physical Therapist Assistant Clinical Experience III. 6 Units.
The terminal, six-week assignment completed during the final quarter of the program. Exposes students to a variety of clinical settings. Forty clock hours per week of supervised clinical experience. The combined total of eighteen weeks—including PTAS 293, 294, 295—of clinical experience prepares the student for entry-level performance.