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.

Opportunities
Physical therapy offers a career for men and women who are interested in medical science and who enjoy working with people. Program graduates have a wide range of opportunities in hospitals, rehabilitation centers, outpatient clinics, national and state agencies, and school systems. For those who desire to further their education, the Doctor of Physical Therapy and the Doctor of Physical Therapy Science degrees are available.

The program
The PTA Program is fifteen months in length and leads to the Associate in Science degree and professional licensure. The program begins with the sophomore year. Instruction begins in June; students participate in graduation ceremonies the following June. Program completion occurs when clinical performance requirements are completed, typically by the end of September.

Clinical learning experience
The program includes supervised, one-on-one clinical instruction across the human lifespan in a variety of settings, including acute and subacute inpatient facilities and outpatient clinics. Students complete three major clinical assignments, each six weeks in length. In addition, students participate in learning experiences at the LLU Medical Simulation Center on campus.

All clinical assignments will be made by the director of clinical education or the program director. Although the program makes an effort to accommodate the student’s preference, the student agrees to accept the clinical assignment 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 cardiopulmonary resuscitation (CPR) for the adult, child, and infant 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, CA.

Professional licensing
Satisfactory completion of the clinical affiliations and degree requirements will qualify the student for the National Physical Therapy Examination (NPTE) for PTAs. State licensure or certification is required to practice as a PTA in all fifty states and DC. Information about licensing or certification in the state in which one wishes to practice can be found on the Web at http://www.apta.org/licensure

Professional association
Students and graduates are eligible for membership in the American Physical Therapy Association. The objectives of the association are to foster development and improvement of service and education. This organization grants student membership at a nominal 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 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 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, and to develop a biblically informed faith and a commitment to lifelong spiritual growth.

Program mission
The PTA Program affirms the mission and values of Loma Linda University and the School of Allied Health Professions by providing an educational program that prepares PTAs with balanced intellectual development, social skills, competent practice, and spiritual connection.
Program goals
In order to achieve the PTA Program mission, the program aims to:

1. Provide technical-level physical therapy education for the PTA that culminates in an Associate in Science degree.
2. Prepare graduates ready to provide physical therapy interventions and services under the direction and supervision of licensed physical therapists in a variety of settings.
3. Prepare graduates for service who demonstrate ethical behavior consistent with legal and professional standards.
4. Provide opportunities for students to gain compassionate insight into practices and behaviors found in a variety of ethnic and cultural backgrounds within an atmosphere of respect for differences.
5. Provide opportunities for graduates to consider the concept of wholeness when addressing the needs of the patient/client in terms of physical, mental, and spiritual concerns.
6. Prepare graduates to communicate effectively with patients/clients and families, when appropriate; with colleagues; and with other members of the health-care delivery team.
7. 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 faculty goals
In order to provide the learning experiences necessary and desired to prepare graduates for practice, the PTA Program faculty will:

1. Hold state practice licensure, and membership in the professional organization.
2. Hold a master’s-level degree or higher.
3. Maintain contemporary knowledge/practice expertise in assigned teaching areas.
4. Practice effective instructional methods relevant to course content, course design, and learning assessment methods.
5. Develop, implement, and evaluate the technical and clinical education components of the PTA curriculum.
6. Accept applicants into the PTA program who have adequately completed all eligibility requirements and who provide sufficient evidence on which to predict successful completion of the PTA program.
7. Use an approach to education in the PTA classroom that reflects an appreciation of the teaching and healing ministry of Jesus Christ.
8. Engage in service for the school, the University, the profession, and/or the community.
9. Model professional and personal behavior that is in harmony with Christ-like values in interactions with students, staff, colleagues, alumni, family, and the public.

Student learning outcomes
The mission of the PTA Program is to graduate physical therapist assistants with balanced intellectual development, social skills, competent practice, and spiritual connection.

Graduates of the program will be able to:

1. Demonstrate a basic level of knowledge and skills appropriate for safe and effective practice as a PTA and as a member of the health-care team.
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 their family members, and clinical personnel.
4. Demonstrate compassionate respect for differences encountered in interactions with individuals from other ethnic and cultural backgrounds.
5. 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), 1111 North Fairfax Street, Alexandria, VA 22314; 703/ 706-3245 or 703/ 706-3245; e-mail: accreditation@apta.org; Website: http://www.capteonline.org

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 a regionally-accredited academic institution (college or university) Note: Grades below C 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 course work before the program begins. Individuals who have earned a bachelor’s degree from a regionally-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
A minimum grade of C (2.0) is required for all courses in the program.

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

**Program requirements**

**Sophomore**

<table>
<thead>
<tr>
<th>Summer Quarter 1</th>
<th>Units</th>
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<tbody>
<tr>
<td>PTAS 201 Anatomy</td>
<td>4</td>
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<tr>
<td>PTAS 205 Introduction to Physical Therapy</td>
<td>1</td>
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<tr>
<td>PTAS 206 Documentation Skills</td>
<td>1</td>
</tr>
<tr>
<td>PTAS 212 Physical Therapy Procedures</td>
<td>3</td>
</tr>
<tr>
<td>PTAS 231 Physical Therapy Modalities</td>
<td>3</td>
</tr>
<tr>
<td>PTAS 275 Psychosocial Aspects of Health</td>
<td>2</td>
</tr>
<tr>
<td>PTAS 265 Professional Seminar</td>
<td>2</td>
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<tr>
<td>RELE 257 Health Care Ethics</td>
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</table>

**Autumn Quarter**

| AHCJ 305 Infectious Disease and the Health-Care Provider | 3     |
| PTAS 203 Applied Kinesiology | 1     |
| PTAS 204 Applied Gait | 3     |
| PTAS 224 General Medicine I | 1     |
| PTAS 225 Neurology | 2     |
| PTAS 227 Therapeutic Exercise | 3     |
| PTAS 236 Applied Electrotherapy | 2     |
| PTAS 265 Professional Seminar | 0     |

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Units</th>
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<tbody>
<tr>
<td>PTAS 226 Orthopaedics I</td>
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</tr>
<tr>
<td>PTAS 234 General Medicine II</td>
<td>1</td>
</tr>
<tr>
<td>PTAS 238 Wound Care</td>
<td>1</td>
</tr>
<tr>
<td>PTAS 243 Applied Geriatrics</td>
<td>3</td>
</tr>
<tr>
<td>PTAS 252 Applied Neurology</td>
<td>3</td>
</tr>
<tr>
<td>PTAS 264 Applied Orthotics and Prosthetics</td>
<td>2</td>
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<tr>
<td>PTAS 265 Professional Seminar</td>
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<tr>
<td>RELR 275 Art and Science of Whole Person Care</td>
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<table>
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<tr>
<th>Spring Quarter</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PTAS 241 Applied Pediatrics</td>
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<tr>
<td>PTAS 251 Orthopaedics II</td>
<td>3</td>
</tr>
<tr>
<td>PTAS 261 Physical Therapy Practice</td>
<td>1</td>
</tr>
<tr>
<td>PTAS 265 Professional Seminar</td>
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<tr>
<td>PTAS 293 Physical Therapist Assistant Clinical Experience I</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Quarter 2</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTAS 294 Physical Therapist Assistant Clinical Experience II</td>
<td>6</td>
</tr>
<tr>
<td>PTAS 295 Physical Therapist Assistant Clinical Experience III</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Units:** 72

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

**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.**
Introduction to general medical conditions, including pathology and management of medical problems. Introduction to diseases of the body systems—including urin ary, digestive, cardiopulmonary, nervous, endocrine, musculoskeletal systems, integumentary, and congenital; as well as childhood diseases. Theoretical principles and practice application of respiratory techniques, exercises, and postural drainage. CPR certification required before the end of the term.

**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 231. Physical Therapy Modalities. 3 Units.
Basic physical therapy modalities—including heat and cold application, hydrotherapy and massage, pool therapy, physiology and control of edema, stump wrapping, standard precautions, and chronic pain management. Lecture and laboratory.

PTAS 234. General Medicine II. 1 Unit.
Introduces students to and familiarizes them with equipment, lines, tubes, life-sustaining equipment, and procedures for the treatment of patients in the acute/inpatient setting. Considers various factors and reactions to medical procedures that may affect the treatment of patients in the acute care setting. Mobilization, functional mobility, exercise, and transfers within the acute care setting. Case scenarios with different situations that the physical therapist assistant may encounter in such acute care facilities as ICU, SNF, hospitals, and CCU. Identifies the roles of multidisciplinary team members managing critical care patients.

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 244. Introduction to Athletic Training for the Physical Therapist Assistant. 1 Unit.
Introductory study of the neuromusculoskeletal system as it applies to the athletic population. Student develops and implements a sports medicine program and participates in physical examination. Medical emergencies in the sports medicine setting, criteria for return to play, types and frequency of sport specific injuries, pregame sidelines/courtside setup, techniques of applying athletic tape to various body locations, and on-field examinations.

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.