

Cardiopulmonary Sciences









Polysomnography- Certificate

The expansion of polysomnography (sleep studies) in the health-care industry has created a marked increase in demand for polysomnography technicians. Many polysomnography clinics are inundated with referrals that may be deferred for months at a time due to inadequate staffing, resulting in delay of sleep disorder diagnoses and appropriate treatments. The certificate in polysomnography is designed for current clinical practitioners and students who are interested in specializing in sleep disorder studies. Both didactic theory and clinical application offered in the program will provide an avenue to gain knowledge, skills, and experience in the expanding discipline of polysomnography. Topics include sleep terminology, sleep structure and disorders, complete patient set-up and monitoring, data acquisition and scoring, and pharmacological and noninvasive interventions. The program is offered on campus and will include: laboratory/clinical rotations, online and classroom discussions, and a case study presentation. Graduates of this program are eligible to sit for the sleep disorder specialist (SDS) examination by the National Board of Respiratory Care (NBRC) and/or the RPSGT examination by the Board of Registered Polysomnography Technologists (BRPT) after completion of the required clinical hours/and requirement for each board examination. * Please see professional examination section

Program Outcome:

After completion of the program, graduates will:

- Be eligible to sit for the Sleep Disorder Specialist (SDS) exam by the National Board of Respiratory Care (NBRC) and/or the RPSGT exam by the Board of Registered Polysomnography Technologists (BRPT).* Professional Examination and Certification Eligibility section.
- 2. Possess skills to recognize and treat a variety of different sleep disorders.
- 3. Be able to effectively perform and interpret a polysomnogram.
- 4. Be able to communicate with patients and staff members professionally.

- 5. Have the skills and knowledge to educate patients about diseases, and treatments.
- Have the skills and knowledge to suggest and implement appropriate sleep disturbance interventions.

Program Objectives:

- 1. Identify basic sleep terminology, sleep structure, and sleep disorders.
- 2. Comprehend the effect of sleep related breathing disorders on patients' physiology.
- 3. Perform and translate the International 10-20 system data acquisition (or equivalent) as it relates to sleep disorders testing.
- 4. Recognize the technology behind the monitoring devices utilized in sleep disorders testing and identify the locations used for patient monitoring.
- 5. Recognize the components of a computerized sleep acquisition system and describe the adjustments necessary to produce a quality/valid study.
- 6. Recognize the components of a sleep report and demonstrate proper application of continuous posi tive airway pressure (CPAP), bi-level ventilation, and oxygen therapy to patients with sleep related breathing disorders.
- 7. Demonstrate the process of a patient set-up, sleep stage, and event scoring.
- 8. Identify cardiac dysrhythmias and physiologic events and their clinical significance during the sleep evaluation.
- 9. Independently perform the patient set-up for a sleep study and begin the data acquisition process; data interpretation; troubleshooting.
- 10. Demonstrate professional behavior towards patients and staff.
- 11. Illustrate professional behavior towards patients with home CPAP for sleep by educating them about its use and effect relevant to their sleep disorder.

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Program Requirements:

To be eligible for this program, in addition to the Loma Linda University School of Allied Health Professions requirements, the following criteria must be met:

- 1. Current Basic Life Support certification from the American Heart Association.
- 2. Minimum of 2.5 GPA.
- 3. Complete an acceptable interview with Program Faculty.
- 4. Three positive personal and/or professional references.
- 5. For current students in the Loma Linda University Cardiopulmonary Sciences program the following must be met:
 - An agreement and acceptance from both program directors to add sleep track/units to the current student plan.

Prerequisite (All prerequisite coursework be completed at a regionally accredited institution)

- Human anatomy and physiology or general biology with laboratory, complete sequence
- Introductory chemistry with laboratory or general chemistry with laboratory
- High school-level physics or introductory physics, one quarter/semester in college; or general physics, one quarter/semester in college.
- Two years of mathematics selected from: algebra I
 (elementary), algebra II (intermediate), or geometry.
 Course work may be taken in high school or college.
- English composition

Co-requisite:

Medical Terminology

Recommended course work

- Speech
- Microbiology
- Sociology
- Basic Life Suppport
- Psychology

Sleep Technology Approved Resource (STAR)

The Polysomnography Certificate program is designated as a STAR provider under the Board of Polysomnographic Technologists (BRPT). Graduates are eligible to use this Focused Training for the RPSGT exam (Pathway 4) and the CPSGT exam (Pathway 3). Please visit the http://http://www.brpt.org//website for more details.

Basic Life Support:

Since this program will have a clinical rotations and patient contact, students are required to have a cardiopulmonary resuscitation (CPR)/BLS card certification. This certification has to be current and obtained from an authorized American Heart Association training center. BLS course is offered at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102.

Clinical Rotations

The polysomnography program offers clinical practicum course at affiliated clinical sites. Thus, students will commute to a 12 hours clinical rotation on every assigned clinical day; this might include day and night shifts. Therefore, each student is responsible for their own transportation to each clinical site. The program will assign clinical instructors for each site to assess student learning and competency check-offs.

Normal time to complete the program: 34 weeks (3 academic quarters) based on full-time enrollment.

How to apply:

Applications are accepted after January 1st of each year for Fall acceptance. Apply online at www.llu.edu .

For more information,

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LLU at a Glance

>>> Founded in 1905 >>> A Seventh-day Adventist institution integrating health, science, and Christian faith >>> Offers over 200 programs in the health sciences >>> Houses eight schools: Allied Health Professions, Behavioral Health, Dentistry, Medicine, Nursing, Pharmacy, Public Health, and Religion >>> About 4,000 students >>> Over 1,300 faculty >>> 2,000 professional researchers >>> \$46 million dollars in private and public grants generated each year >>> Many service learning opportunities

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