

Polysomnography

The Polysomnography program prepares individuals with the knowledge and skills to critically assess, plan, implement and evaluate clinical care and management of sleep disorders and daytime alertness.

Students in this program learn to use sleep technology as part of a team, under the general supervision of a licensed physician, by applying a unique body of knowledge and methodological skills involved in the education, evaluation, treatment, and follow-up of sleep disorders in patients of all ages. The curriculum includes instruction in performing tests such as the Polysomnogram, PAP Titration Studies, Multiple Sleep Latency Test, Maintenance of Wakefulness Test, Actigraphy, Home Sleep Testing, and others used by a physician to diagnose and treat sleep disorders. These tests include the recording, monitoring and analysis of electroencephalography (EEG), electromyography (EMG), electrooculography (EOG), electrocardiography (ECG), respiration, blood oxygen levels, and other physiological parameters. Testing procedures may involve the application and adjustment of therapeutic modalities such as supplemental oxygen or positive airway pressure and include application of techniques, equipment, and procedures that are safe, aseptic, preventative, and restorative. Interpretive knowledge is required to recognize and respond to respiratory, cardiac, or behavioral events that may occur during testing procedures. Students also learn to provide support services related to the ongoing treatment of sleep-related problems. The professional realm of this support includes patient instruction on the use of devices for the treatment of breathing problems during sleep and helping individuals develop sleeping habits that promote good sleep hygiene.

Polysomnographic Technologists may be employed in facility-based or private sleep diagnostic and treatment centers, durable medical equipment companies, medical specialty sales, research, and more.

For specific information about potential positions and wages in polysomnography employment, visit the Central Piedmont Career Coach website.

PSG 110. Intro to Polysomnography. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course introduces the polysomnography profession. Topics include the history of the profession and role of the polysomnographic technologist, communication, time management, infection control, basic patient assessment, and medical gas therapy. Upon completion, students should be able to demonstrate competence in concepts through written and laboratory evaluations.

PSG 111. Neuro/Cardiopulmonary A&P. 4.0 Credits. Class-4.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a concentrated study of anatomy and physiology essential to the practice of polysomnography. Emphasis is placed on the physiology of the nervous, cardiovascular, and pulmonary systems and basic pharmacological principles. Upon completion, students should be able to demonstrate competence in concepts through written evaluation. Prerequisites: Take One Set: Set 1: Take BIO 163; Set 2: Take BIO 165 and BIO 166; Set 3: Take BIO 168 and BIO 169

PSG 112. Polysomnography Fundamentals. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides the knowledge and skills necessary to manage/function in a polysomnographic laboratory. Topics include recordkeeping, scheduling techniques, creation/implementation of departmental policies, reimbursement, the technologist's role as sleep advocate, and case management/patient education. Upon completion, students should be able to demonstrate competence in concepts through written evaluation.

PSG 113. Polysomnography Instrumentation. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0

This course introduces the fundamental concepts of sleep technology electrical equipment and recording of bio-electric potentials. Topics include Ohm's Law; common mode rejection; components related to recording bio-electric potentials; function and application of sleep technology equipment; and construct/verify montages. Upon completion, students should be able to demonstrate competence in polysomnography equipment, instrumentation, recording of bioelectric potential concepts, and ancillary electrical signals through written and laboratory evaluations.

Prerequisites: Take PSG 110

PSG 114. Polysomnography Clinical Education I. 3.0 Credits. Class-0.0. Clinical-9.0. Lab-0.0. Work-0.0

This course provides orientation to the polysomnography clinical environment. Emphasis is placed on work flows, reviewing patient charts and orders, patient preparation and hook-ups, and proper time management. Upon completion, students should be able to demonstrate successful completion of polysomnography clinical learning outcomes. Prerequisites: Take PSG 110

PSG 210. Polysomnography I. 7.0 Credits. Class-3.0. Clinical-9.0. Lab-2.0. Work-0.0

This course provides entry-level didactic, laboratory, and clinical training in polysomnography. Emphasis is placed on medical terminology, instrumentation setup and calibration, recording and monitoring techniques, and patient-technologist interactions. Upon completion, students should be able to demonstrate competence in concepts and procedures through written, laboratory and clinical evaluations. Prerequisites: Take One: PSG 111 or PSG 189

PSG 211. Polysomnography II. 7.0 Credits. Class-2.0. Clinical-9.0. Lab-6.0. Work-0.0

This course provides advanced-level didactic, laboratory, and clinical training in polysomnography. Emphasis is placed on the knowledge and skills necessary to obtain and evaluate high quality sleep recordings. Upon completion, students should be able to demonstrate competence in concepts and procedures through written, laboratory and clinical evaluations.

Prerequisites: Take PSG 210

PSG 212. Infant/Pediatric Polysomnography. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course provides the knowledge and skills to perform and score polysomnographic procedures on infants and pediatric patients. Emphasis is placed on infant/pediatric assessment, monitoring, and sleep disorders. Upon completion, students should be able to demonstrate competence in concepts through written and laboratory evaluations.

PSG 213. Case Study/Exam Review. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides an opportunity to review clinical cases and prepare for the polysomnography credentialing exam. Emphasis is placed on case management and review for the Registered Polysomnographic Technologist Exam. Upon completion, students should be able to successfully complete practice exams.

PSG 214. PSG Clinical Applications I. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

This course provides practical application of theories covered in previous PSG courses. Emphasis is placed on polysomnography testing and procedures. Upon completion, students should be able to demonstrate competence through laboratory evaluation.

PSG 215. PSG Clinical Applications II. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

This course provides practical application of theories covered in previous PSG courses. Emphasis is placed on polysomnography testing and procedures. Upon completion, students should be able to demonstrate competence through laboratory evaluation.