

# PSG A150: INTERMEDIATE POLYSOMNOGRAPHY

Item	Value
Curriculum Committee Approval Date	02/24/2021
Top Code	121100 - Pharmacy Technician
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

## Course Description

A fundamental and detailed study of the various sleep disorders, their symptoms, consequences, treatments, and polysomnographic manifestations. Sleep stage scoring, pattern recognition and data computation are covered. Instruction in patient examination and history taking for sleep disorders is included. COREQUISITE: PSG A160. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

1. Describe and identify the signs, symptoms, treatments, Polysomnographic recording techniques, and other differences observed in various sleep disorders.
2. Evaluate a patient for sleep disorders and take a detailed sleep history.
3. Describe the techniques of titrating CPAP, BiPAP, and oxygen for a patient with sleep disordered breathing.

## Course Objectives

- 1. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments and implications of sleep apnea and breathing-related disorders of sleep.
- 2. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments and implications of narcolepsy and associated disorders of excessive sleepiness.
- 3. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments and implications of insomnia and associated disorders of initiating and maintaining sleep.
- 4. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments and implications of Periodic Limb Movement Disorder and associated disorders of arousal during sleep.
- 5. Recognize and understand the implications and polysomnographic findings of epilepsy, Parkinson's disease, clinical depression, cerebral degenerative disease, and other medical and psychiatric disorders associated with sleep disruption.
- 6. Recognize and understand the technological effects of instrumentation on polysomnographic tracings.

- 7. Know how to titrate CPAP, BiPAP, and oxygen for a patient with obstructive sleep apnea and associated breathing disorders during sleep.
- 8. Evaluate a patient for sleep disorders and take a detailed sleep history.

## Lecture Content

Overview of Sleep Disorders Medicine Normal sleep vs. abnormal sleep Effects of aging on sleep; Geriatric sleep disorders Sleep apnea - symptoms, signs and treatments Breathing disorders during sleep Insomnia - symptoms, signs and treatments Narcolepsy and excessive sleepiness PLM's, restless legs, arousal disorders NREM Parasomnias RM sleep, REM sleep disorders, NPT Circadian rhythms and rhythm disorders Medical and psychiatric disorders and sleep Patient evaluation and history taking Sleep staging, scoring, data computation Technology of Polysomnography, ambulatory vs. laboratory studies Course review

## Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)

## Instructional Techniques

Segments of the course will be presented in lecture format with PowerPoint presentations, video, and examples. Polygraph examples will be used in class for demonstrations and small group work.

## Reading Assignments

Required Textbook reading (2 - 3 hours/week)

## Writing Assignments

Short answer test questions and mathematical calculations on exams.

## Out-of-class Assignments

Required supplemental reading including journal articles and online research. (2 - 3 hours/week).

## Demonstration of Critical Thinking

Attendance. Quizzes covering material from reading and lectures. Quizzes are not comprehensive and will cover material from previous segments. Comprehensive Midterm exam. Comprehensive Final exam.

## Required Writing, Problem Solving, Skills Demonstration

Short answer test questions and mathematical calculations on exams.

## Eligible Disciplines

Diagnostic medical technology-diagnostic medical sonography, neurodiagnosti...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

## Textbooks Resources

1. Required Teofilo L. Lee-Chiong Jr. MD, Cynthia Mattice MS RPSGT RST, Rita Brooks MEd R EEG/EPT. Fundamentals of Sleep Technology, 3rd ed. LWW; 3rd edition, 2019