

# PSG A280: PEDIATRIC SLEEP MEDICINE

Item	Value
Curriculum Committee Approval Date	02/24/2021
Top Code	121100 - Pharmacy Technician
Units	2 Total Units
Hours	36 Total Hours (Lecture Hours 36)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

## Course Description

An advanced practice of polysomnography to understand and gain knowledge of current trends in the pediatric sleep and the importance of competent performance in the field as it pertains to pediatric sleep. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

1. Coordinate pediatric treatment options and guidelines, mask options, mask fittings, indications and contraindications.
2. Describe and identify pediatric sleep disorders, insomnias (sleep onset and maintenance difficulties), hypersomnia, sleep and breathing disorders, parasomnias, and sleep in medical disorders in special populations.
3. Apply the AASM scoring rules for infant and children sleep staging, including infant and children respiratory waveform recognition, and generate reports of calculations and nighttime observations.

## Course Objectives

- 1. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments and implications of pediatric sleep disorders
- 2. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments including: (1) Sleep and colic (2) Bedtime problems and night awakening (3) Sleep onset association disorder (4) Nighttime fears (5) Primary Insomnia
- 3. Describe and interpret Hypersomnia including (1) Idiopathic hypersomnia (2) Kleine-Levin syndrome (3) Post-Traumatic and post-neurosurgical hypersomnia (4) Medication related hypersomnia
- 4. Identify and define pediatric obstructive sleep apnea syndrome, cognitive and behavioral consequences of obstructive sleep apnea, cardiovascular consequences of obstructive sleep apnea, metabolic consequences of obstructive disordered breathing, Congenital central hypoventilation syndrome, Rapid-onset obesity with hypothalamic dysfunction, hypoventilation and autonomic dysregulation (ROHHAD)
- 5. Recognize and respond to Pediatric sleep and breathing disorders, apnea of prematurity, Apparent Life-Threatening Events (ALTE)
- 6. Define and understand the symptoms, signs, consequences, polysomnographic findings, treatments in pediatric sleep with medical disorders of special populations.

- 7. Recognize and respond to parasomnias, disorders of arousal, and sleep related enuresis
- 8. Complete and report infant and children sleep staging, children respiratory rules, TcCO<sub>2</sub>/ETCO<sub>2</sub> normal and abnormal values, AHI calculations, and summary of nighttime study.
- 9. Know how to titrate CPAP, BiPAP, and oxygen for a pediatric patient with obstructive sleep apnea and associated breathing disorders during sleep.

## Lecture Content

Overview of Pediatric Sleep Medicine Normal sleep vs. abnormal sleep Sleep apnea - symptoms, signs and treatments Breathing disorders during sleep Insomnia - symptoms, signs and treatments NREM Parasomnias REM sleep, REM sleep disorders Medical and psychiatric disorders and sleep Patient evaluation and history taking Sleep staging, scoring, data computation Treatment options and guidelines Mask selection, and proper interface fit

## 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 (0.5 - 1 hours/week) Required supplemental reading including journal articles and online research. (1 - 2 hours/week)

## Writing Assignments

Short answer/fill-in on exams and one "current issues" article reviews. (0.5 - 1.5 hours / week)

## Out-of-class Assignments

Supplemental reading including journal articles and online research. (1 - 2 hours/week)

## Demonstration of Critical Thinking

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 Lourdes M. DelRosso MD FAASM, Richard B. Berry MD, Suzanne E. Beck MD, Mary H Wagner MD, Carole L. Marcus MBBCh. Pediatric Sleep Pearls, 1st ed. Elsevier, 2016 Rationale: Expert coverage of normal sleep in children, as well as sleep disorders associated with

common medical, neurologic, psychiatric, neurodevelopmental, and genetic conditions. Up-to-date information on pediatric obstructive sleep apnea syndrome diagnosis and management.