RSPC A212: TOPICS IN NEONATES

Item	Value
Curriculum Committee Approval Date	11/22/2022
Top Code	121000 - Respiratory Care/Therapy
Units	1 Total Units
Hours	27 Total Hours (Lecture Hours 18; Lab Hours 9)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Pass/No Pass (B)

Course Description

This course will help prepare the student for employment in the neonatal intensive care unit. PREREQUISITE: Students need to be graduates of the OCC Respiratory Care Program or both a licensed Respiratory Care Practitioners by the Respiratory Care Board of California and Registered Respiratory Therapists by the National Board for Respiratory Care (NBRC); Students must possess their NRP and PALS AHA life support certifications. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate understanding of the advanced knowledge, skills, behaviors required of Respiratory Therapists working in the neonatal intensive care unit.

Course Objectives

- 1. Describe the elements of neonatal / pediatric resuscitation.
- 2. Discuss and demonstrate appropriate management of neonatal and pediatric airways.
- 3. Identify common diseases, pulmonary pathologies, and apply respiratory assessment skills to recognize patient manifestations presenting in the neonatal intensive care unit.
- 4. Explain special procedures and diagnostic techniques utilized in the NICU.
- 5. Describe complexities of working in the neonatal intensive care unit including; inter-professional relations, coordination of cares, ethical concerns, and documentation.

Lecture Content

Neonatal Patient Assessment History and Physical Assessment of neonate Chest X-rays and other imaging procedures Interpretation of laboratory values Emergency Care Questions pertaining to neonatal resuscitation Managing acute airway obstruction ECG Interpretation Airway Management Humidity and aerosol therapy Intubation and Extubation Difficult airways Bronchial hygiene and suctioning Pharmacology Mechanical ventilation Monitoring, Changes, Troubleshooting, Weaning PCV OSV Conventional Bubble / NIPPV HFNC Neonatal Pathologies Identification and Treatment Therapeutic Procedures Breathing techniques Hyperinflation therapy Airway clearance techniques Humidity and aerosol Oxygen therapy Special Procedures and General Patient Care Bronchoscopy Chest Tube Surfactant Specialty Gas Home Care End of Life Diagnostic Testing Obtaining and interpreting arterial blood gas Pathology components Hemodynamic monitoring General Neonatal Intensive Care Monitoring Inter-professional relations Coordination of cares Ethical concerns Documentation

Lab Content

Labs will consist of various activities to assess the students clinical abilities, aptitude for clinical training, and complete the necessary pre-clinical experiences required to begin clinical training in the neonatal intensive care unit.

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)
- Lab (04)
- DE Online Lab (04X)

Instructional Techniques

Lecture and application of ideas along with lab activities that assess the students clinical skills and aptitude.

Reading Assignments

Students will have a weekly reading assignment consisting of 2 hours focusing on the topics of that weeks primary educational goal.

Writing Assignments

Short answer writing assignments.

Out-of-class Assignments

Primarily the 2 hours of reading with the potential for short homework quizzes to reinforce concepts.

Demonstration of Critical Thinking

Final lab practicum

Required Writing, Problem Solving, Skills Demonstration

Periodic quizzes; examinations; comprehensive final exam; written homework assignments; participation. Regular and substantive interaction and participation.

Eligible Disciplines

Respiratory technician: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Respiratory technologies: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Walsh, B.. Neonatal and Pediatric Respiratory Care, 6th ed. Elsevier, 2023