RSPC A286: CLINICAL LAB 4

Item	Value
Curriculum Committee Approval Date	12/06/2023
Top Code	121000 - Respiratory Care/Therapy
Units	4 Total Units
Hours	240 Total Hours (Lab Hours 240)
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

Clinical application of respiratory therapy primarily in critical care areas. Includes airway management, patient assessment, ventilator mechanics and management, and monitoring of the critically ill patient. PREREQUISITE: RSPC A276. COREQUISITE: RSPC A280 and RSPC A290. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Apply advanced critical care assessment and therapeutic modalities to the critical care and emergency settings to include adult, pediatric and neonatal intensive care.

Course Objectives

- I Perform and apply principles of each of the following tasks utilizing actual patients in the intensive care setting according proper protocol and procedure. The student will also explain patient analysis of condition, application of appropriate care actions, and analysis of response in the adult, pediatric and neonatal settings.
- I. 1. Assess patient for ventilatory/oxygenation support.
- I. 2. Set up, administer, adjust and trouble-shoot mechanical ventilators.
- I. 3. Apply and explain rationale for appropriate alternative settings to mechanical ventilation.
- I. 4. Wean patient from mechanical ventilation to correct support therapy.
- I. 5. Apply adjunct support techniques: Artificial airways and care Humidification Medication administration
- I. 6. Assess patient condition, response to therapy, and determine alternatives to current therapy with appropriate rationale.
- I. 7. Application of diagnostic procedures, interpretation, and evaluation to therapy application.
- I. 8. Demonstrate and explain proper documentation of patient care.
- I. 9. Demonstrate and maintain proper professional appearance and attitude.
- I. 10. Apply appropriate information from physician input
- I. 11. Ability to interact with physicians
- I. 12. Present evaluative case study.

Lecture Content

Topic 1: Orientation to the hospital Review of policy and procedure Legal documentation as required by the facility Topics 2 - 5: Advanced practice in adult intensive care units Life support systems with mechanical ventilation Set up, evaluate, and trouble shoot initial ventilator requirements Assessment of the patient for changes in ventilator oxygenation settings. Apply calculations to determine effectiveness Alternative settings to ventilatory and oxygenation support. PEEP CPAP Pressure Control/Pressure Support IMV/SIMV Weaning techniques and patient assessment Adjunct support systems to include: Artificial airways and care Humidification Infection control Medication administration Patient assessment: Swan-Ganz catheter/hemodynamics Non-invasive oxygenation monitoring and assessment Arterial blood gas analysis, interpretation, and application Continuation of previous patient assessment techniques Overall evaluation of patient course of stay to include evaluation, alterations to therapy based on physiologic and pathologic changes, course of stay, and outcomes Topics 6 - 10 Advanced practice in neonatal and pediatric intensive care units High risk birth with newborn assessment. Life support systems with mechanical ventilation Alternative settings to ventilatory and oxygenation support. PEEP CPAP Pressure Control/Pressure Support IMV/SIMV Weaning techniques and patient assessment Adjunct support systems to include: Artificial airways and care Humidification Infection control Postural drainage with percussion Medication administration Patient assessment: Non-invasive oxygenation monitoring and assessment Arterial blood gas analysis, interpretation, and application Continuation of previous patient assessment techniques Neonatal evaluation of patient course of stay to include evaluation, alterations to therapy based on physiologic and pathologic changes, course of stay, and outcomes. Evaluation: Overall evaluation of patient course to include changes in response to physiologic alterations, treatment assessment, pathophysiology, and outcomes. Case study evaluation

Lab Content

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Method(s) of Instruction

- Lab (04)
- Work Experience (20)
- Non-Directed Clinical (NDR)

Instructional Techniques

Instructional methodologies include a combination of technique demonstration and application to patient care. Individual activities along with discussion and instructor feedback.

Reading Assignments

Students must demonstrate applied skills to actual patients. Critical thinking is developed though pretherapy patient assessment, therapeutic technique, and analysis of patient response. Written legal chart documentation.

Writing Assignments

Students must demonstrate applied skills to actual patients. Critical thinking is developed though pretherapy patient assessment, therapeutic technique, and analysis of patient response. Written legal chart documentation.

Out-of-class Assignments

Students must demonstrate applied skills to actual patients. Critical thinking is developed though pretherapy patient assessment, therapeutic technique, and analysis of patient response. Written legal chart documentation.

Demonstration of Critical Thinking

Student evaluation is a combination of critique of patient assessment skills, therapeutic techniques, verbal examination, and written chart assignment. These methods are applied to each specific case and therapeutic modality performed throughout the course.

Required Writing, Problem Solving, Skills Demonstration

Students must demonstrate applied skills to actual patients. Critical thinking is developed though pretherapy patient assessment, therapeutic technique, and analysis of patient response. Written legal chart documentation.

Eligible Disciplines

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

Other Resources

1. Laboratory Coat 2. Stethoscope 3. Photo ID clinical badge 4. Watch 5. Black scrubs embroidered with OCC Respiratory Care emblem 6. RSPC A286 Clinical Skills Check-Offs Packet