RCP 112 Patient Management

COURSE DESCRIPTION:

Prerequisites: RCP 111 with a minimum grade of C
Corequisites: RCP 153

This course provides entry-level skills in respiratory care procedures in acute and non-acute care settings. Emphasis is placed on therapeutic modalities and physiological effects, monitoring mechanical ventilation, and problem-solving strategies based on evidence-based medicine protocols and clinical practice guidelines. Upon completion, students should be able to demonstrate competence in respiratory therapy concepts and procedures through written and laboratory evaluations.
Course Hours per Week: Class, 6. Semester Hours Credit, 4.

LEARNING OUTCOMES:

Upon completing requirements for this course, the student will be able to:

1. Identify modes of ventilation.
2. Identify the need to initiate mechanical ventilation.
3. Be able to apply critical thinking skills and evidence-based medicine to evaluate a patient's ventilatory status.
4. Be able to evaluate a patient's liberation from mechanical ventilation.

OUTLINE OF INSTRUCTION:

I. Identify modes of ventilation
   - A. Identify volume modes of ventilation
     - i. list the different volume modes
     - ii. list each setting required for the mode
   - B. Identify pressure modes of ventilation.
     - i. list the different pressure modes
     - ii. list each setting required for the mode

II. Identify the need to initiate mechanical ventilation.
   - A. Use evidence-based criteria to determine a need for ventilation
     - i. assess for acute or impending respiratory failure. assess for increased work of breathing
   - B. List the physiological objectives to improve ventilation
     - i. support or manipulate gas exchange
     - ii. increase lung volume
     - iii. reduce the work of breathing
   - C. List the clinical objectives of mechanical ventilation
     - i. reverse acute respiratory failure
     - ii. reverse hypoxemia
     - iii. minimize complications

III. Apply critical thinking skills and evidence-based medicine to evaluate a patient's ventilatory status.
    A. Use calculations to assess oxygenation status
        i. including but not limited to: PAO2, CaO2, A-aO2
    B. Critically assess patient lab values for improvement or deficit.
        i. including but not limited to: ABG, CBC,

IV. Evaluate a patient's liberation from mechanical ventilation
    A. Evaluate current state of patient's pathology
        i. review chest x-ray
        ii. assess vital signs
    B. Evaluate patient's ability to protect their airway
        i. completion of weaning parameters
        ii. assessment of bedside ventilatory mechanics
    C. Evaluate patient's oxygenation and/or ventilatory status
        i. assessment of arterial blood gas values
        ii. assessment of ventilation parameters
    D. Evaluate patient's liberation readiness and success
        i. bedside ventilatory mechanics
        ii. assessment of patient's level of consciousness
    E. Evaluate the need for return to mechanical ventilation
        i. evaluation of breath sounds
        ii. evaluate for stridor.

REQUIRED TEXTBOOK AND MATERIAL:

The textbook and other instructional material will be determined by the instructor.