

RCP 210
CRITICAL CARE CONCEPTS

COURSE DESCRIPTION:

Prerequisites: RCP 112

Corequisites: RCP 214, RCP 223, RCP 234

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the application and management of mechanical ventilation, assessment underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in respiratory therapy concepts and procedures through written, laboratory and/or clinical simulation evaluations.

Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit: 4.

LEARNING OUTCOMES:

At the completion of the course requirements, the student should understand:

- I. Monitoring and management of the patient in the intensive care unit
- II. Discontinuing ventilatory support
- III. Advanced airway care
- IV. Thoracentesis, chest tubes, and pleural drainage systems
- V. Sleep disorders
- VI. ACLS protocols

OUTLINE OF INSTRUCTION:

- I. Monitoring and management of the patient in the intensive care unit
 - a. Principles of monitoring
 - b. Pathophysiology and monitoring
 - c. Respiratory monitoring
 - d. Cardiac and cardiovascular monitoring
 - e. Neurologic monitoring
 - f. Monitoring renal function
 - g. Nutritional monitoring
 - h. Troubleshooting
- II. Discontinuing ventilatory support
 - a. Reasons for ventilator dependence
 - b. Patient evaluation
 - c. Preparing the patient
 - d. Methods
 - e. Newer techniques for facilitation ventilator discontinuance
 - f. Selecting an approach
 - g. Monitoring during weaning

- h. Extubation
 - i. Failure
 - j. Chronically ventilator-dependent patients
 - k. Terminal weaning
- III. Advanced airway care
- a. Replacement of ET tubes with tracheostomy tube
 - b. Tracheostomy care
 - c. Changing a tracheostomy tube
- IV. Thoracentesis, chest tubes, and pleural drainage systems
- a. Indications and procedure
 - b. Theory and function of drainage systems
 - i. One, two, and three bottle set-up
 - ii. Commercial devices
- V. Sleep disorders
- a. Definitions
 - b. Pathophysiology
 - c. Clinical features
 - d. Laboratory testing
 - e. Treatment
 - f. Role of the respiratory therapist in disorders of sleep
- VI. ACLS protocols
- a. 2010 American Heart Association guidelines

REQUIRED TEXTBOOKS AND MATERIALS:

Textbook to be selected by instructor.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 919-536-7208 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 10-209.