Course Information
Division: Health Sciences
Contact Hours: 4
Theory: 45
Lab Hours: 20
Total Credits: 3

Prerequisites:
RTH 120 – Respiratory Care Techniques III &
RTH 121 – Respiratory Care Clinical Practice II

Co-requisite:
RTH 211 – Respiratory Clinical Practice III

Course Description
This classroom and laboratory course covers the cardiopulmonary equipment, techniques and management theory for the adult patient in an intensive care unit. Topics include advanced concepts in ventilation techniques and management of the adult patient in a variety of specialty intensive care units. Laboratory topics will cover important skills involved with Advanced Cardiac Life Support, ventilation modes, arterial lines, chest tubes and other technical skills needed by a registered respiratory therapist.

Program Outcomes Addressed by this Course:
Upon successful completion of this course, students should be able to meet the program outcomes listed below:
A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

Course Outcomes
In order to evidence success in this course, the students will be able to:

1. Describe and differentiate common diagnostic techniques used in the adult intensive care settings.
   Applies To Program Outcome
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

2. Given appropriate information, describe the selection and monitoring of ventilation techniques necessary to manage an adult ventilator patient in the acute and alternate site setting.
   Applies To Program Outcome
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
3. Given appropriate information, describe how ventilation techniques can be altered for an adult patient experiencing a change in their cardiopulmonary status.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

4. Describe and differentiate the cardiopulmonary management principles associated with adult patients in an emergency room setting and surgical, medical, cardiothoracic, neuro, and trauma/burn intensive care settings.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

5. Given appropriate information, set-up a mechanical ventilator on a test lung (mock patient) including all necessary parameters and alarm settings.
   **Applies To Program Outcome**
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

6. Adjust ventilator and alarm settings in response to changes in the cardiopulmonary condition via patient assessment, ventilator graphics, and arterial blood gases.
   **Applies To Program Outcome**
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

7. Identify sources and correct conditions that cause ventilator alarms to activate.
   **Applies To Program Outcome**
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

8. Demonstrate a basic familiarity with devices including set-up and problem troubleshooting for a variety of equipment used in the intensive care setting including capnometers, pulse oximeters, arterial lines, pulmonary artery catheters, esophageal balloon catheters, metabolic cart, chest tubes, and a variety of airway care devices.
   **Applies To Program Outcome**
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

9. Demonstrate the ability to follow ACLS protocols in the care of patients.
   **Applies To Program Outcome**
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

Date Updated: 6/21/2017
By: NAP