

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: RTH 236

Credits: 3

Course Title: Critical Care Monitoring

Course Description (including lecture hours, lab hours, total contacts)

Focuses on techniques and theory necessary for the evaluation and treatment of the critical care patient, especially arterial blood gases and hemodynamic measurements. Explores physiologic effects of advanced mechanical ventilation. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose:

Respiratory care practitioners must be able to use critical thinking skills to make informed decisions in the critical care environment. This course integrates all previously taught competencies and clinical assessment techniques with critical thinking skills. This course introduces students to various subjects that utilize advanced monitoring techniques.

Course Prerequisites/Corequisites

Successful completion of the entry-level AAS degree in Respiratory Therapy

Course Objectives

Upon completing the course, the student will be able to:

- a. Understand and interpret commonly ordered clinical tests on blood and body fluids
- b. View and interpret pathologies of the chest X- Ray's.
- c. Interpret important clinical facets of mechanical ventilation, including peak pressure, plateau pressure, oxygenation, ventilation, and weaning criteria necessary to successfully liberate the adult patient from the ventilator.
- d. Identify malnutrition in the adult patient and understand how inadequate nutrition is responsible for prolonging the need for mechanical ventilatory support.

Major Topics to be Included

1. Interpretation and analysis of commonly ordered test on blood and body fluids
2. Evaluation chest X-Rays for expansion, clarity, and specific abnormalities of the heart and lungs
3. Analysis of normal and abnormal data from the adult patient receiving mechanical ventilatory support
4. Assessment of invasive cardiac devices, such as CVP, arterial and pulmonary artery catheter placement and data.

Effective Date of Course Content Summary (Month, Date Year): November 4, 2008