

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

**Course Prefix and Number:** RTH 236

**Credits:** 3

**Course Title:** Critical Care Monitoring

**Course Description:** 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. Prerequisites: Successful completion of all curriculum courses offered during the first four semesters of the AAS degree in Respiratory Therapy. 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 and Co-requisites:**

Prerequisites: Successful completion of all curriculum courses offered during the first four semesters of the AAS degree in Respiratory Therapy

**Student Learning Outcomes:**

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 chest x-rays;
- 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; and
- 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:**

- a. Interpretation and analysis of commonly ordered tests on blood and body fluids
- b. Evaluation of chest x-rays for expansion, clarity, and specific abnormalities of the heart and lungs
- c. Analysis of normal and abnormal data from the adult patient receiving mechanical ventilatory support
- d. Assessment of invasive cardiac devices, such as CVP, arterial, and pulmonary artery catheter placement and data

**Date Created/Updated** (Month, Day, and Year): November 4, 2008