J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: RTH 132 **Credits: 4**

Course Title: Respiratory Care Theory and Procedures II

Course Description:

Presents theory of equipment and procedures and related concepts used for patients requiring general acute and critical cardiopulmonary care. Part II of II. Prerequisites: Successful completion of all curriculum courses offered during the first two semesters of the AAS degree in Respiratory Therapy. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

General Course Purpose:

This course teaches students the initiation, modification, and discontinuance of mechanical ventilation for patients requiring acute and critical cardiopulmonary care.

Course Prerequisites and Co-requisites:

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

Student Learning Outcomes:
Upon completing the course, the student will be able to

- Identify mechanical ventilator candidates;
- Determine the most appropriate positive pressure ventilators needed for specific patients;
- Determine initial ventilator settings;
- Correctly modify the ventilator when change is indicated;
- Identify the need for care and make modifications as necessary for mechanically ventilated patients;
- Identify complications due to mechanical ventilation;
- Determine what monitoring techniques would be well suited;
- Identify the readiness for weaning;
- Demonstrate post ventilator care;
- Evaluate the need for return to the ventilator.

Major Topics to Be Included:

- Physiologic Effects of Positive Pressure Ventilation
- Indications for Mechanical Ventilation
- Ventilator Commitment
- Determination of Settings on the Mechanical Ventilator
- Monitoring the Patient/Mechanical Ventilator System
- Ventilatory Maintenance
- Ventilator Discontinuance
- Physiologic Effects of Positive End-Expiratory Pressure
- Indications for Positive End-Expiratory Pressure Therapy
- Physiologic Positive End-Expiratory Pressure

- Prophylactic Positive End-Expiratory Pressure
- Inadvertent Positive End-Expiratory Pressure
- Auto or Intrinsic Positive End-Expiratory Pressure
- Clinical Goals of Positive End-Expiratory Pressure
- Initiations for Positive End-Expiratory Pressure Therapy
- Monitoring Positive End-Expiratory Pressure Therapy
- Discontinuance of Positive End-Expiratory Pressure Therapy
- Technical Application of Positive End-Expiratory Pressure

Effective Date/Updated: November 13, 2008