

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: **RTH 131** **Credits:** **4**

Course Title: **Respiratory Care Theory and Procedures I**

Course Description:

Presents theory of equipment and procedures and related concepts used for patients requiring general acute and critical cardiopulmonary care. Part I of II. Prerequisites: Successful completion of all curriculum courses offered during the first semester of the AAS degree in Respiratory Therapy. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week. 4 credits

General Course Purpose:

This course teaches students equipment theory, use, and application in preparation for providing respiratory care services to patients during clinical rotations.

Course Prerequisites and Co-requisites:

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

Student Learning Outcomes:

Upon completing the course, the student will be able to

- Discuss the planning, implementation, and evaluation of Hyperinflation Therapy;
- Demonstrate the ability to initiate, monitor, modify, and discontinue the use of any Hyperinflation Therapy;
- Discuss the anatomy of how airway clearance mechanisms work and what disease/disorders impair their function;
- Assess the need for Bronchial Hygiene Therapy;
- Initiate, monitor, modify, and discontinue the use of airway clearance mechanisms;
- Assess the need for artificial airways and the proper selection;
- Demonstrate the ability to insert, monitor, and maintain an artificial airway;
- Demonstrate the ability to properly discontinue an artificial airway;
- Assess the need for suctioning, demonstrate the proper technique, and identify and respond to complications;
- Discuss the concept of respiratory failure;
- Assess the need for mechanical ventilation; and
- Introduce the modes of mechanical ventilation.

Major Topics to Be Included:

- Airway Care
- Fluidics
- Technical Aspects of Mechanical Ventilators
- Continuous Mechanical Ventilation
- Positive End-Expiratory Pressure
- High-Frequency Ventilation

- Ventilatory Support of the Neonatal and Pediatric Patient

Effective Date/Updated: November 13, 2008