

**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 (including lecture hours, lab hours, and total contacts)

Presents theory of equipment and procedures and related concepts used for patients requiring general acute and critical cardiopulmonary care. Prerequisite: Completion of the Pre-Nursing and Allied Health (Pre-Respiratory Therapy) Career Studies Certificate and RTH 110. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

General Course Purpose

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

Course Prerequisites/Co requisites (*Entry-level competencies **required** for enrollment*)

Prerequisite: Completion of the Pre-Nursing and Allied Health (Pre-Respiratory Therapy) Career Studies Certificate and RTH 110

Course Objectives (Each item should complete the following sentence.)

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

- a. Discuss the planning, implementation, and evaluation of Hyperinflation Therapy
- b. Demonstrate the ability to initiate, monitor, modify, and discontinue the use of any Hyperinflation Therapy
- c. Discuss the anatomy of how airway clearance mechanisms work and what disease/disorders impair their function
- d. Assess the need for Bronchial Hygiene Therapy
- e. Initiate, monitor, modify, and discontinue the use of airway clearance mechanisms
- f. Assess the need for artificial airways and the proper selection
- g. Demonstrate the ability to insert, monitor and maintain an artificial airway
- h. Demonstrate the ability to properly discontinue an artificial airway
- i. Assess the need for suctioning, demonstrate the proper technique and identify and respond to complications
- j. Discuss the concept of Respiratory Failure
- k. Assess the need for mechanical ventilation
- l. Introduce the modes of mechanical ventilation

Major Topics to be Included

- a. Airway Care
- b. Fluidics
- c. Technical Aspects of Mechanical Ventilators
- d. Continuous Mechanical Ventilation
- e. Positive End-Expiratory Pressure
- f. High-Frequency Ventilation
- g. Ventilatory Support of the Neonatal and Pediatric Patient

Effective Date of Course Content Summary (Month, Date Year): November 13, 2008