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. 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.

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 Objectives:
Upon completing the course, the student will be able to:
1. Discuss the planning, implementation, and evaluation of Hyperinflation Therapy.
2. Demonstrate the ability to initiate, monitor, modify, and discontinue the use of any Hyperinflation Therapy.
3. Discuss the anatomy of how airway clearance mechanisms work and what disease/disorders impair their function.
4. Assess the need for Bronchial Hygiene Therapy.
5. Initiate, monitor, modify, and discontinue the use of airway clearance mechanisms.
6. Assess the need for artificial airways and the proper selection.
7. Demonstrate the ability to insert, monitor, and maintain an artificial airway.
8. Demonstrate the ability to properly discontinue an artificial airway.
9. Assess the need for suctioning, demonstrate the proper technique, and identify and respond to complications.
10. Discuss the concept of Respiratory Failure.
11. Assess the need for mechanical ventilation.
12. Introduce the modes of mechanical ventilation.

Major Topics to be Included:
1. Airway Care
2. Fluidics
3. Technical Aspects of Mechanical Ventilators
4. Continuous Mechanical Ventilation
5. Positive End-Expiratory Pressure
6. High-Frequency Ventilation
7. Ventilatory Support of the Neonatal and Pediatric Patient

Effective Date of Course Content Summary: November 13, 2008