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.
- 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