Course Prefix and Number: RTH 131

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 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
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; and
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

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