

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: RTH 132

Credits: 4

Course Title: Respiratory Care Theory and Procedures II

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 two semesters 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 the initiation, modification, and discontinuance of mechanical ventilation for patients requiring acute and critical cardiopulmonary care.

Course Prerequisites and Co-requisites:

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

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Identify mechanical ventilator candidates;
- b. Determine the most appropriate positive pressure ventilators needed for specific patients;
- c. Determine initial ventilator settings;
- d. Correctly modify the ventilator when change is indicated;
- e. Identify the need for care and make modifications as necessary for mechanically ventilated patients;
- f. Identify complications due to mechanical ventilation;
- g. Determine what monitoring techniques would be well suited;
- h. Identify the readiness for weaning;
- i. Demonstrate post ventilator care;
- j. Evaluate the need for return to the ventilator.

Major Topics to Be Included:

- a. Physiologic Effects of Positive Pressure Ventilation
- b. Indications for Mechanical Ventilation
- c. Ventilator Commitment
- d. Determination of Settings on the Mechanical Ventilator
- e. Monitoring the Patient/Mechanical Ventilator System
- f. Ventilatory Maintenance
- g. Ventilator Discontinuance
- h. Physiologic Effects of Positive End-Expiratory Pressure
- i. Indications for Positive End-Expiratory Pressure Therapy
- j. Physiologic Positive End-Expiratory Pressure
- k. Prophylactic Positive End-Expiratory Pressure
- l. Inadvertent Positive End-Expiratory Pressure
- m. Auto or Intrinsic Positive End-Expiratory Pressure
- n. Clinical Goals of Positive End-Expiratory Pressure
- o. Initiations for Positive End-Expiratory Pressure Therapy
- p. Monitoring Positive End-Expiratory Pressure Therapy
- q. Discontinuance of Positive End-Expiratory Pressure Therapy
- r. Technical Application of Positive End-Expiratory Pressure

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