

**Northwest Arkansas Community College
Health Professions Division
Respiratory Therapy Program Course Outline**

Course Number and Title

RESP 2514 Mechanical Ventilation II

Catalog Description

This is a lecture/laboratory course designed to provide the student with an understanding of ventilator maintenance, weaning from mechanical ventilation and non-invasive ventilation. Emphasis will be placed on bedside ventilatory assessment of the patient, weaning modalities, and CPAP/BiPAP procedures. In addition, there will be guided, hands-on practice of respiratory therapy equipment.

Prerequisites

- RESP 2102 Concepts in Respiratory Care
- RESP 2103 Cardiopulmonary Anatomy and Physiology
- RESP 2104 Respiratory Care Sciences
- RESP 2204 Cardiopulmonary Assessments and Diagnostics
- RESP 2123 Pulmonary Diseases
- RESP 2214 Equipment and Procedures
- RESP 2222 Pharmacology for Respiratory Care
- RESP 2501 Dysrhythmia for Respiratory Therapists
- RESP 2306 Clinical Practicum I
- RESP 2423 Clinical Practicum II
- RESP 2414 Mechanical Ventilation I
- RESP 2433 Pediatrics and Perinatology
- PSYC 2003 General Psychology

Credit Hours/Contact Hours/Load Hours

4 credit hours

64

6 load hours

Target Audience and Transfer

Students admitted into the Respiratory Therapy Program.
May transfer to other respiratory therapy programs.

Student Learning Outcomes

- Compare and contrast ventilator associated pneumonia and hospital acquired pneumonia.
- Create a VAP protocol for implementation to prevention, diagnose, and treat VAP
- Relate common pharmacologic agents used in critical care medicine to the management of ventilator assisted individuals
- Differentiate the pulmonary and extra-pulmonary effects of mechanical ventilation
- Demonstrate the ability to wean patients from mechanical ventilation using a variety of methods.
- Recommend weaning modalities appropriate to patient conditions and adapt as indicated.
- Examine the use of mechanical ventilation in the home
- Determine the cause of ventilator errors and correct as needed
- Examine and apply advanced modes and special techniques used in mechanical ventilation

Topics

- Complications of Mechanical Ventilation
- Effects of Mechanical Ventilation
- Weaning from Mechanical Ventilation & Long Term Mechanical Ventilaiton
- Trouble Shooting and Problem Solving
- Special Techniques in Ventilatory Support

Format

Hybrid and laboratory, Required personal computer with web camera, Microsoft Word and PowerPoint.

Forms of Assessment

- Written examinations
- Homework
- Participation
- Simulations
- Discussions
- Must obtain a cumulative score of 75.5% to pass the course