

Northwest Arkansas Community College
Health Professions Division
Respiratory Therapy Program

Discipline Code

RESP

Course Number

2414

Course Title

Mechanical Ventilation I

Catalog Description

(F) A laboratory course designed to provide the student with practical experience in initiating, monitoring, and managing mechanical ventilation. Focuses on the rationale, concepts, principles and contraindications of mechanical ventilation.

Prerequisites

Admission by acceptance into the Respiratory Therapy Program only.

Credit Hours

4

Contact Hours

48 lecture, 16 lab contact hours

Load Hours

6

Semesters Offered

Fall

ACTS Equivalent

None

Grade Mode

A-F

Learning Outcomes

- Develop a working knowledge base of mechanical ventilation terms and core knowledge
- Differentiate positive pressure from negative pressure breathing and ventilators
- Perform and evaluate calculations related to pulmonary function and ventilation mechanics
- Examine the mechanical functions and parts of the ventilator
- Assemble and prepare a ventilator for use
- Examine how a breath is delivered and modes of mechanical ventilation
- Recommend initial ventilator settings that are appropriate for the patient condition
- Apply the mechanical ventilator
- Apply appropriate safety measures while using mechanical ventilation
- Recommend and apply the appropriate NIPPV interface
- Differentiate various forms of respiratory failure
- Recommend appropriate ventilator interventions: modes and settings
- Interpret ventilator graphics and other monitoring devices
- Recommend and perform lung recruitment maneuvers as indicated
- Perform comprehensive patient and ventilator assessment
- Interpret assessment findings and adapt mechanical ventilation treatment plans accordingly

General Education Outcomes Supported

- Students develop higher order thinking skills.
- Students can employ a variety of sources to locate, evaluate, and use Information.

