

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

Course Number and Title

RESP 2204 Cardiopulmonary Assessments and Diagnostics

Catalog Description

Lecture and Laboratory course designed to focus on the skills required to establish a respiratory care plan, perform physical assessment, and utilizing equipment and procedures to diagnose and manage cardiopulmonary diseases. Emphasis is placed on physical assessment of the patient and performing and interpreting diagnostic tests.

Prerequisites

- Anatomy and Physiology I
- Anatomy and Physiology II
- Introduction to Computer Information or Electronic Health Records HIM 1123
- College Algebra or Survey of Technical Math MATH 1003
- English Composition I
- Medical Terminology
- Microbiology
- Admission into the Respiratory Therapy Program

Credit Hours/Contact Hours/Load Hours

4 credit hours
64 contact hours
6 load hours

Target Audience and Transfer

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

Student Learning Outcomes

- Interview the patient for a pulmonary history, obtain vital signs and compare findings with normal values.
- Perform a physical examination on a patient with pulmonary disorders.
 - Adult and Geriatric assessment
 - Interpret Breath Sounds and breathing patterns
- Relate physical assessment findings to specific disease processes
- Recommend appropriate clinical laboratory tests.

- Assess the nutritional status of patients with respiratory disease.
- Relate sleep and breathing disorders to the practice respiratory care
 - Recommend sleep diagnostic testing
 - Perform Sleep diagnostic testing
 - Interpret Sleep diagnostic testing
- Assess the home care patient
- Demonstrate appropriate documentation techniques and content
- Interpret the following data found in the patient record
 - PFT results
 - Blood gas results
 - Imaging study results
 - Pulmonary mechanics
- Interpret a chest radiograph
 - Quality of image
 - Position of endotracheal or tracheostomy tube
 - Presence, or change in, cardiopulmonary abnormalities such as pneumothorax, consolidation, pleural fluid, pulmonary edema
 - Presence of foreign bodies
 - Perform/Measure the Following Procedures
- Perform and interpret bedside spirometry; FVC, FEV1, tidal volume, minute volume, vital capacity, peak flow and other measured values
- Recommend procedures to obtain additional data
 - Radiographic and other imaging studies
 - PFT
 - Sleep
 - Blood analysis
- Describe the use, maintenance, and quality control of Pulmonary Function Testing equipment.
- Evaluate and Monitor Patient's Objective and Subjective Responses to Respiratory Care
- Classify/interpret results of blood gas and hemoximetry

Topics

- Interviewing and Respiratory History
- Physical, Neuro, and Clinical laboratory assessments
- Geriatric and Nutritional Assessment
- Sleep and Home Care Assessment
- Documentation
- Pulmonary Function Testing
- Chest Imaging
- Arterial Blood Gas/Hemoximetry Analysis

Format

Hybrid with Laboratory, Required personal computer with web camera, microphone, internet access, and Microsoft Office applications.

Forms of Assessment

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