Northwest Arkansas Community College

Health Professions Division Respiratory Therapy Program

## **Discipline Code**

RESP

## **Course Number**

2433

## **Course Title**

Pediatrics & Perinatology

## **Catalog Description**

(F) A laboratory course designed to provide the student with practical experience in initiating, monitoring, and managing oxygen therapy, aerosol therapy, CPAP, and mechanical ventilation in children. Emphasis is placed on common cardiopulmonary disorders of the neonate and pediatric patient and the respiratory therapeutics used in managing such disorders

## Prerequisites

Admission by acceptance into the Respiratory Therapy Program only.

#### **Credit Hours**

3

## **Contact Hours**

32 lecture 16 lab

## Load Hours

5

#### **Semesters Offered**

Fall

# **ACTS Equivalent**

None

## **Grade Mode**

A-F

#### **Learning Outcomes**

- Examine the stages of fetal lung development
- Relate surfactant levels to fetal lung maturity
- Examine the effect of the birth process on removal of fetal lung fluid and associated complications
- Outline the stages of heart development and the fetal shunts
- Examine the changes associated with extaruterine life as it relates to vascular pressures in the placenta, umbilical vein, fetal shunts, right-side heart chambers, left-side heart chambers, pulmonary artery, lungs, aorta, and umbilical arteries
- Evaluate maternal medical history for associated pregnancy and newborn risk factors
- Recommend pulmonary interventions based on clinical findings during the birth process.
- Perform comprehensive neonatal and pediatric pulmonary and physical assessments
- Formulate treatment plans for neonatal and pediatric patients
- Interpret radiographic findings of the neonatal and pediatric patient
- Determine underlying pulmonary complications based on blood gas finding
- Perform arterial and capillary blood samples
- Perform noninvasive monitoring of neonatal and pediatric patients
- Recommend therapeutic modalities for neonatal and pediatric patients
- Perform mechanical ventilation for neonatal and pediatric patients

## **General Education Outcomes Supported**

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