



## **RESP 220 - Neonatal/Pediatric Respiratory Care Course Outline**

**Approval Date:** 03/12/2020

**Effective Date:** 08/14/2020

### **SECTION A**

**Unique ID Number** CCC000552271

**Discipline(s)** Respiratory Technologies

**Division** Health Occupations

**Subject Area** Respiratory Care

**Subject Code** RESP

**Course Number** 220

**Course Title** Neonatal/Pediatric Respiratory Care

**TOP Code/SAM Code** 1210.00 - Respiratory Care Therapy/Therapist\* / C - Occupational

**Rationale for adding this course to the curriculum** To improve course content with activities, leading to certifications.

**Units** 4

**Cross List** N/A

**Typical Course Weeks** 18

**Total Instructional Hours**

#### **Contact Hours**

**Lecture** 54.00

**Lab** 0.00

**Activity** 36.00

**Work Experience** 0.00

**Outside of Class Hours** 126.00

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**Total Contact Hours** 90

**Total Student Hours** 216

**Open Entry/Open Exit** No

**Maximum Enrollment** 30

**Grading Option** Letter Grade Only

**Distance Education Mode of Instruction** On-Campus  
Hybrid

## SECTION B

### General Education Information:

## SECTION C

### Course Description

**Repeatability** May be repeated 0 times

**Catalog Description** Students will receive instruction in neonatal and pediatric respiratory care. The course will cover fetal lung development, circulatory changes in the newborn, and neonatal and pediatric diseases and treatment. Course will include curriculum leading to professional certifications.

### Schedule Description

## SECTION D

### Condition on Enrollment

#### 1a. Prerequisite(s)

- RESP 185 with a minimum grade of C or better

#### 1b. Corequisite(s): *None*

#### 1c. Recommended: *None*

#### 1d. Limitation on Enrollment: *None*

## SECTION E

### Course Outline Information

#### 1. Student Learning Outcomes:

- A. Discuss neonatal/pediatric physiology and pathophysiology.
- B. Describe assessment techniques for the neonatal/pediatric population.
- C. Describe and optimize patient-ventilator interactions for neonatal/pediatric population.

#### 2. Course Objectives: Upon completion of this course, the student will be able to:

- A. Discuss fetal lung development.
- B. Analyze maternal factors that can place fetuses at risk for respiratory problems.
- C. Describe tests for fetal well being.
- D. Evaluate assessment techniques for the neonate and child.
- E. Explain key aspects of neonatal and pediatric diseases.
- F. Interpret neonatal and cord blood gases.
- G. Manipulate neonatal ventilatory parameters.
- H. Interpret and monitor data pertaining to neonatal mechanical ventilation.
- I.

#### 3. Course Content

- A. Fetal lung development
- B. Maternal factors that can place fetuses at risk for respiratory problems
- C. Tests for fetal well-being
- D. Assessment technologies for the neonate and child
- E. Aspects of neonatal and pediatric diseases
- F. Interpret neonatal and cord blood gases
- G. Neonatal ventilatory parameters
- H. Monitor data pertaining to neonatal mechanical ventilation
- I.

#### 4. Methods of Instruction:

**Activity:** Some related activity will be completed in an on-line environment (e.g., respiratory care case study or scenario).

**Lecture:** Lecture will be conducted face-to-face.

**Observation and Demonstration:**

**Online Adaptation:** Activity, Discussion

**2. Methods of Evaluation:** Describe the general types of evaluations for this course and provide at least two, specific examples.

**Typical classroom assessment techniques**

Exams/Tests --

Quizzes -- Example: Describe fetal circulation; include the three fetal shunts.

Simulation --

Class Work --

Final Exam -- Example: Given a neonatal patient scenario, recommend the appropriate therapy.

Mid Term --

Letter Grade Only

**3. Assignments:** State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

Assigned readings from textbooks as:

1. Read chapter 1, Fetal Lung Development, and answer the questions at the end of the chapter.

2. Read the PowerPoint on neonatal assessment and describe the difference between infant and adult vital signs.

B. Writing Assignments

1. Choose three maternal risk factors and describe the possible negative outcome that could occur.

2. Explain the APGAR and Silverman scoring systems.

C. Other Assignments

None.

**4. Required Materials**

**A. EXAMPLES of typical college-level textbooks (for degree-applicable courses) or other print materials.**

Book #1:

Author: American Heart Association

Title: Neonatal Resuscitation Textbook

Publisher: American Heart Association

Date of Publication: 2016

Edition: 7th

Book #2:

Author: Walsh, Brian, et. al.

Title: Perinatal and Pediatric Respiratory Care

Publisher: Saunders Elsevier

Date of Publication: 2019

Edition: 5th Ed.,

**B. Other required materials/supplies.**