

# RESPIRATORY CARE (RESP)

## **RESP 1021 Cardiopulmonary Anatomy and Physiology (3 Credits)**

This course includes an in-depth study of the structure and function of the pulmonary and cardiac system. Topics include the circulatory system, applied physiology and physical principles of the respiratory system, and gas exchange.

Prerequisites: Admission to Program

Corequisite: RESP 1041 and RESP 1041L

Previous: Legacy Equivalent(s): RSP\* 121

## **RESP 1031 Respiratory Care Pharmacology (3 Credits)**

General principles of respiratory care pharmacology will be covered including review of the anatomic nervous system, the process of drug approval in the United States, principles of drug action, calculating drug dosages, administration of aerosolized agents, administration of surfactants, neuromuscular blocking agents and smoking cessation agents.

Prerequisites: RESP 1021

Previous: Legacy Equivalent(s): RSP\* 131

## **RESP 1041 Principles of Respiratory Care I (3 Credits)**

This course introduces students to fundamental principles and practice of respiratory care. Topics covered include basic patient assessment, principles of infection control, medical gas therapy and physical properties of gases, oxygen therapy devices, oxygen analyzers, and aerosol and humidity therapy devices.

Prerequisites: Admission to Program

Corequisite: RESP 1021 and RESP 1041L

Previous: Legacy Equivalent(s): RSP\* 141

## **RESP 1041L Principles of Respiratory Care I Lab (1 Credits)**

This course introduces students to fundamental principles and practice of respiratory care in a laboratory setting. Topics covered include professionalism, patient assessment and monitoring, principles of infection control, medical gas therapy, oxygen therapy devices, oxygen analyzers, aerosol and humidity therapy devices, and medical terminology and documentation. The emphasis of the course will be hands-on practice with respiratory care devices.

Previous: Legacy Equivalent(s): RSP\* 141L

## **RESP 1042 Principles of Respiratory Care II (5 Credits)**

This course builds on the concepts introduced in RSP 141. Topics presented include patient assessment, airway clearance, lung inflation therapy, airway management, non-invasive ventilation, arterial blood gases, ethics and professionalism, medical documentation, communication, and cultural competencies. This course integrates theory with laboratory and clinical practice.

Prerequisites: RESP 1021, RESP 1041, RESP 1041L

Corequisite: RESP 1031

Previous: Legacy Equivalent(s): RSP\* 160

## **RESP 1094 Clinical Practicum (2 Credits)**

This is a clinical course designed to enhance the student's practice of respiratory care modalities to adult and pediatric patients. Students will perform supervised floor therapies on adult and pediatric patients in the clinical setting. Students will develop respiratory care plans that integrate respiratory care theory and practice.

Prerequisites: RESP 1031, RESP 1042 or RESP 2051

Prerequisite or corequisite: RESP 2051 or RESP 2060

Previous: Legacy Equivalent(s): RSP\* 181

## **RESP 2001 Future Trends (2 Credits)**

This is a seminar course focusing on current issues affecting respiratory care. Students will present future trends topics to the class throughout the semester.

Prerequisites: RESP 2051, RESP 2060, RESP 2094

Previous: Legacy Equivalent(s): RSP\* 201

## **RESP 2051 Cardiopulmonary Pathophysiology (3 Credits)**

The course material covers etiology, clinical manifestations, diagnostic testing, and treatment of diseases affecting the cardiopulmonary system. Students are expected to integrate previous knowledge of cardiopulmonary anatomy and physiology, pharmacology, and treatment modalities into the course content. Students will evaluate case-studies and recommend procedures to gather additional clinical data. Critical thinking and decision making will be stressed in this course.

Prerequisites: RESP 1031, RESP 1042 and BIO 2112

Previous: Legacy Equivalent(s): RSP\* 251 or RSP\* 151

## **RESP 2060 Mechanical Ventilation (4 Credits)**

This course is designed to introduce the student to the principles and practices of invasive and non-invasive mechanical ventilation. Classification, modes of operation, indications, applications, physiologic effects, complications, and discontinuation of mechanical ventilation will be studied. Laboratory practices will include hands on manipulation of state-of -the-art mechanical ventilators and simulation experiences. Troubleshooting, clinical simulations, and case-study presentations will be incorporated into the lecture and laboratory sections.

Prerequisites: RESP 1042 or RESP 2051

Corequisite: RESP 1094 or RESP 2094

Previous: Legacy Equivalent(s): RSP\* 260

## **RESP 2065 Advanced Critical Care (3 Credits)**

This course focuses on the critical care patient assessment, the study of invasive and non-invasive hemodynamics to assess oxygenation, heart function and fluid balance, with special attention given to the disease states that may cause an abnormality in any one of these areas. Critical care pharmacology, neurologic assessment and advanced modes of mechanical ventilation will also be discussed.

Prerequisites: RESP 2060 OR RESP 2051

## **RESP 2071 Diagnostic Respiratory Care (3 Credits)**

The student will learn to perform and interpret bedside spirometry tests as well as interpret the results of advanced pulmonary function studies including quality control techniques, exercise testing, cardiovascular stress testing and metabolic monitoring. The student will be introduced to pulmonary rehabilitation, in-home respiratory care, and respiratory care in alternative care settings.

Prerequisites: RESP 1021 or RESP 2051

Previous: Legacy Equivalent(s): RSP\*271, RSP\*274

## **RESP 2085 Perinatal and Pediatric Respiratory Care (2 Credits)**

This course provides the student with a comprehensive study of pediatric and neonatal respiratory care. Topics include embryology, fetal development, and neonatal transition diagnostic and therapeutic procedures, cardiopulmonary pathophysiology, ventilation management, and critical care techniques. This course will also include neonatal and pediatric diseases and disorders.

Prerequisites: RESP 2060, RESP 2094

Corequisite: RESP 2194

Previous: Legacy Equivalent(s): RSP\*261, RSP\*291

**RESP 2094 Advanced Clinical Practicum I (2 Credits)**

This course provides supervised clinical experience in providing respiratory therapy to intensive care patients. Clinical experiences will focus on mechanical ventilation of the adult patient. Students will develop respiratory care plans that integrate respiratory care theory and practice.

Prerequisite or corequisite: RESP 2051 or RESP 2060

Previous: Legacy Equivalent(s): RSP\* 281

**RESP 2194 Advanced Clinical Practicum II (2 Credits)**

This course provides supervised clinical experiences in the adult, neonatal and pediatric intensive care units. Clinical experiences will focus on hemodynamic monitoring and assessment, respiratory care in the emergency setting, and continuous mechanical ventilation of the adult, neonate, and pediatric patient. Students are required to complete a capstone project involving the independent management of critical care patients receiving mechanical ventilation.

Prerequisites: RESP 2060

Previous: Legacy Equivalent(s): RSP\* 282