

# RESP COURSES

Opposite each course title are three numbers such as 3-2-4. The first number indicates the number of regular classroom hours for the course each week; the second number indicates the number of laboratory hours per week; and the third number indicates the hours of credit awarded for the successful completion of the course. Listed in parentheses at the end of each course description is the term(s) that the course is normally offered. F=Fall, S=Spring, and M=Summer.

The college reserves the right to cancel or delete any course with insufficient enrollment.

## Courses

### **RESP 1100. Intro to Respiratory Care. 3-0-3 Units.**

This course introduces students to the Respiratory Care profession and the skills needed to become a Respiratory Therapist. Topics will include medical terminology, the history of the Respiratory Care profession, and a discussion of the future of Respiratory Care. The functions of the NBRC, AARC, CoARC, and the Georgia Medical Board will be examined and the credentialing and licensing processes are outlined. The provision of quality and evidence-based respiratory care, patient safety, communication and record keeping, principles of infection control, and ethical and legal implications of practice are also reviewed. Prerequisite: Acceptance into the Respiratory Program

### **RESP 1111. Fundamentals of Resp Care. 3-2-4 Units.**

This course introduces the principles and practices of Non Critical Respiratory Care. The course will emphasize Therapist Driven Protocols and Clinical Practice Guidelines. Basic Respiratory Care skills in modalities such as oxygen, humidity, bland aerosol, medicated aerosols, passive hyperinflation, chest physiotherapy, postural drainage, airway clearance therapies, arterial blood gases and bedside pulmonary function studies will be developed. Emphasis will be placed on setting up, using and troubleshooting equipment, and on the physical and physiologic principles of gas exchange, ventilation, acid base balance and gas laws. The application of basic physical principles involving the properties of matter, thermodynamics, and mechanics as it relates to respiratory practices and equipment will be explored in class and lab. To progress to RESP 1121, each student will be required to successfully complete and pass a Lab competency exam. Basic math competency is required. Students may be required to demonstrate proficiency in basic math skills for progression in the program. Prerequisites: Admission into Respiratory Care Program, RESP 1100 is required as a prerequisite or a co-requisite. Corequisites: RESP 1131.

### **RESP 1121. Clinical Practicum I. 0-16-5 Units.**

An introduction to respiratory care of the non-critically ill Patient in the clinical environment. An emphasis will be placed on departmental protocols, clinical practice guidelines, patient identification, and communication skills. The student will be required to master the following modalities: oxygen therapy, humidity therapy, bland continuous aerosol therapy, medicated nebulizer therapy, passive hyperinflation, chest physiotherapy and postural drainage, arterial blood gas draws and analysis, equipment cleaning and environmental therapy. Basic airway management, and bedside pulmonary function testing will also be explored. Equipment theory and application will be reinforced. Prerequisites: RESP 1111, RESP 1131, current CPR Corequisite: RESP 1132, RESP 1133.

### **RESP 1131. Patient Assess & Protocols. 3-2-4 Units.**

This course introduces the concepts and techniques of patient assessment through inspection, palpation, percussion, and auscultation. The student will demonstrate proficiency in patient physical examination, and learn to take a complete patient medical history. Students will acquire knowledge of how to assess cardiopulmonary symptoms, vital signs, ABG's, and interpretation of lab values such as the CBC, electrolytes and microbiology. Principles of barrier protection for blood and body fluid exposures, and isolation will be reviewed. Students will learn basic chest x-rays, ECG monitoring, and Pulmonary Function studies. (Each student will be required to successfully complete a Lab competency examination in order to progress to RESP 1121.) Co-requisite: RESP 1111. Prerequisites: Admission into Respiratory Care program RESP 1100 is required as a prerequisite or a co-requisite.

### **RESP 1132. Cardiopulmonary Pharmacology. 3-0-3 Units.**

A general pharmacology course for the respiratory care professional caring for the acute and sub-acute patient. Emphasis will be placed on the indications, contraindications, hazards, and routes of administration for the drugs discussed. The pharmacology of the major therapeutic classes of drugs important to respiratory care will be presented. Prerequisites: RESP 1111, RESP 1131. Corequisites: RESP 1121, RESP 1133.

### **RESP 1133. Cardiopulmonary Anatomy & Phys. 3-0-3 Units.**

A study of normal and abnormal anatomy and physiology of the cardiac, pulmonary, and renal systems. The mechanisms of homeostatic control for acid/base balance, ventilation, gas transport, and circulation will be addressed. Hemodynamic monitoring will be emphasized. Prerequisites: RESP 1111, RESP 1131. Corequisites: RESP 1121, RESP 1132.

### **RESP 2110. Mech Ventilation/Critical Care. 3-2-4 Units.**

This course introduces the critical care modalities of airway management and positive pressure ventilation including tracheal suctioning, endotracheal intubation, and tracheostomy care. Concepts of mechanical ventilation are presented. Other critical care skills such as arterial lines, hemodynamic monitoring, advanced patient monitoring, bronchoscopy, and tracheostomy are presented. Basic math skills are required for this course. Each student will be required to successfully pass a lab competency exam in order to progress to RESP 2210. Co-requisite: RESP 2201. Prerequisites: RESP 1121, RESP 1132, RESP 1133.

### **RESP 2121. Neonatal/Pediatric Resp Care. 2-0-2 Units.**

The course focuses on respiratory care modalities and concepts specifically related to the pediatric and neonatal patient. Some topics include: fetal lung development, fetal circulation and gas exchange, and maternal fetal assessments. Students will review respiratory diseases and congenital disorders of the heart and respiratory tract. Concepts of mechanical ventilation and critical care monitoring are also introduced along with airway management. Oxygen and aerosol therapy are also discussed. Critical thinking skills will be emphasized to support the application of therapist driven protocols. Prerequisites: RESP 2110, RESP 2310. Corequisites: RESP 2210, RESP 2130, sophomore year.

### **RESP 2130. Specialized Areas of Resp Care. 2-0-2 Units.**

This course surveys the important principles and practices of respiratory care in specialty areas. Specialized areas include but are not limited to: advanced modes of ventilation, quality control, capnography, bronchoscopy, pulmonary function studies, long term care, and sleep disorders. Students will be required to present evidence based case studies in specialty areas. Co-requisite: RESP 2220, RESP 2330. Prerequisites: RESP 2121, RESP 2310.

**RESP 2201. Clinical Practicum IA. 9-1-3 Units.**

This course is a continuation of Clinical Practicum I and a bridge to Clinical Practicum II. Emphasis will be placed on refining skills and care for the non-critical patient with a gradual development of skills and competencies to care for ventilator dependent patients. Students will apply skills they will be learning in RESP 2110. Prerequisite: RESP 1121 Co-requisites: RESP 2110

**RESP 2210. Clinical Practicum II. 0-16-5 Units.**

This course is a continuation of RESP 1121 and RESP 2201. Emphasis will be placed on departmental protocols and clinical practice guidelines. Students will care for adult critically ill patients in the Intensive Care Unit. Mastery of active hyperinflation therapies, chest physiotherapy, arterial blood punctures and analysis, and concepts of airway management and mechanical ventilation is expected. The student will be required to attend a competency workshop and to successfully demonstrate intubations and ventilator competency. Students will be required to complete weekly logs and case studies as part of this course. Co-requisite: RESP 2121, RESP 2310.

Prerequisites: Current ACLS, RESP 1121, RESP 2201.

**RESP 2220. Clinical Practicum III. 0-16-5 Units.**

Practicum to support content presented in RESP 2121 and RESP 2130. Practical experiences will occur in proportion to emphasis placed on the cognitive content in the companion courses. This course may also provide an opportunity for accelerated or advance students to explore additional clinical experiences outside the usual program scope. Emphasis will be placed on the neonatal/pediatric intensive care patient, pulmonary function studies and sleep studies.

Prerequisites: RESP 2121, RESP 2210, RESP 2310 Co-requisite: RESP 2130, RESP 2330.

**RESP 2310. Cardiopulm Disease & Treatment. 3-0-3 Units.**

A survey course of the clinical pathophysiology of selected cardiopulmonary diseases. The emphasis will be placed on the description of the etiology, clinical manifestations, diagnosis, therapeutics, and prognosis of acute and chronic diseases of the cardiopulmonary patient. Co-requisite: RESP 2210.

Prerequisites: RESP 1121, RESP 1132, RESP 1133.

**RESP 2330. Credential Preparation. 1-0-1 Unit.**

This course will focus on a review of essential concepts of Respiratory Care with emphasis on content for national credentialing. Each student must take the NBRC multiple choice and clinical simulation practice exam. Students will be required to attend a national review seminar. This course will also prepare students to obtain licensure and prepare the student with skills necessary for job placement.

Prerequisites: RESP 2121, RESP 2130, RESP 2210.

Corequisites: RESP 2220.

**RESP 4010. Adv Sem Neonatal/Peds Res Care. 3-0-3 Units.**

Focuses on the advanced practice of Respiratory Care in pediatrics and neonatology. Students will be required to obtain certification in AHA courses that relate to pediatric or neonatal life support to include: Pediatric advanced life support, NRP, or Stable.

Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.

**RESP 4020. Adv Sem Critical Care/Mech Ven. 3-0-3 Units.**

This course reviews relevant material to prepare the student for the ACCS Exam. Particular focus includes advanced modes of mechanical ventilation. Students are required to develop a Powerpoint presentation and discuss an assigned mode of advanced ventilation.

Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.

**RESP 4110. Mentoring/Educ in Healthcare. 3-0-3 Units.**

Introduces topics related to clinical education, professional supervision, and mentoring in Respiratory Care. Beyond student supervision, the course will discuss supervision of professionals in the workplace and the emerging importance of professional mentoring for ongoing professional development. Students will be required to purchase online courses through the AARC.

Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.

**RESP 4120. Geriatrics/LT Respiratory Care. 3-0-3 Units.**

This course provides an analysis of the current professional environment and the role of the respiratory therapist in the long-term care setting. Students will be required to interview a homecare respiratory therapist. Class topics include: Assessment of the homecare patient, respiratory care of the elderly, and geriatric assessment. Additional topics include pulmonary rehabilitation and disease management.

Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.

**RESP 4130. Research Healthcare Prof. 3-0-3 Units.**

This course presents a review of basic statistics and its application to evidence-based theory as it pertains to the practice of clinical medicine. Modules in accessing computer based medically oriented information and medical data bases are presented. The course emphasizes the use of literature to validate and improve the practice of clinical medicine. Students identify, review, and critique published literature relevant to clinical settings. Students learn to use medical literature as a tool in clinical decision making.

Prerequisites: MATH 2200 with a grade of "C" or better; RRT Credential and acceptance into the Bachelor of Science program.

**RESP 4140. Mngt in Cardiopulmonary Dept. 3-0-3 Units.**

This course will present topics related to the management of the Cardiopulmonary Department Beyond basic principles of management, this course will explore the responsibilities of the Cardiopulmonary Department manager. Topics include: structuring of an RT department, measurement of departmental performance, and budget preparation. Students will be required to discuss the skills needed to be an effective manager and also the challenges of management. Other topics reviewed in this class include: the organizational chart of a hospital, budget categories, the metrics of clinical quality and RVU's.

Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.