# RESPIRATORY THERAPY

# Associate of Applied Science Admission Procedures Program Description:

The Associate of Applied Science Degree in the Respiratory Therapy program is a sequence of courses designed to prepare graduates to assist physicians in the evaluation, diagnosis, and treatment of patients with cardiopulmonary dysfunction. Conditions requiring respiratory care include asthma, emphysema, chronic obstructive lung disease, pneumonia, cystic fibrosis, infant respiratory distress syndrome, and conditions brought on by trauma and postoperative surgical complications. Respiratory Therapists treat a diverse group of patients ranging from newborns and children to adults and the elderly.

<u>Length of Program</u>: A minimum of five (5) semesters is required to complete the RESP Occupational Core Courses.

<u>Entrance Dates</u>: Students may take pre-respiratory occupational courses at any time. Each summer a new group of students is selected to begin the professional respiratory courses in the upcoming fall semester.

# In order to be considered for acceptance to the Respiratory Therapy program:

- · Acceptance to Dalton State College;
- · Must be at least 18 years of age;
- · Minimum cumulative college Grade Point Average of 2.50/4.00;
- Have completed required pre-program college courses: ENGL 1101; MATH 1111; BIOL 2251K and 2252K and 2260K; and CHEM 1211K or CHEM 1151K;
- At least a "C" must be earned in each pre-program course. Pre-program courses taken more than five years prior to enrollment in the program will be evaluated by the Respiratory Therapy program faculty and may need to be repeated. Only courses that had the same documented content and hours of credit will be accepted and then only if the applicant has applied the knowledge of the course through documented work experience in a hospital, lab, pharmacy, or patient care setting.
- Completed program application by May 25th preceding the fall semester in which you wish to enroll. (Students can obtain the application on the Respiratory Department website or by contacting the program director at 706-272-2657.)
- Complete Interview Process

# **Admission Selection Process:**

Admission selection is competitive and each applicant is awarded points for the following:

- · College GPA;
- · Number of college credits completed;
- · Prior work experience;
- · References' recommendations;
- · GPA of required pre-program science courses.
- · Student Interview

The Respiratory Care Professional (RCP) is a caregiver with the responsibility of providing life supporting therapies and diagnostic services. Implied in this care giving role are essential job functions

that require the RCP to demonstrate certain cognitive, psychomotor, and affective skills. The performance of these job functions must be consistent with the expectation that the RCP must not place himself/herself, a fellow worker, or the patient in jeopardy.

The purpose of the following is to identify the essential functional requirements of the RCP in the categories of visual acuity, hearing, physical ability, speech, manual dexterity, and mental stress. The examples below are not all inclusive.

# **Physical Standards for Respiratory Care Professionals:**

The respiratory student must be able to:

- work in a clinical setting eight to twelve hours a day performing physical tasks without jeopardizing patient, colleague, or his own safety;
- frequently bend, reach, stoop, lift, and use manual dexterity operating medical equipment, and performing necessary patient therapies.
   This includes sufficient tactile ability for performing a physical assessment, as well as manipulation of syringes to draw arterial blood safely without harm to patient or self;
- 3. lift devices weighing up to 50 pounds;
- report visual observations of patients and equipment operations, as well as read the patient's medical records and medical information;
- adequately hear the patient during all phases of care, especially breath sounds through a stethoscope and perceive and interpret equipment signals;
- communicate clearly and instruct patients before, during, and after procedures.

# Mental/Attitudinal Standards for Respiratory Care Professionals:

The Respiratory Therapists must:

- function calmly under stressful situations, maintain composure while managing multiple tasks simultaneously, and prioritize multiple tasks;
- exhibit social skills necessary to interact effectively with patients, families, supervisors, physicians and co-workers of the same or different cultures;
- maintain personal hygiene consistent with close personal contact associated with patient care;
- display attitudes and actions consistent with the ethical standards of the profession as stated by the American Association of Respiratory Care. These ethical standards can be found on their website at http:// www.aarc.org/.

# **Additional Requirements:**

• Students must earn a "C" (75%) or better in all professional courses with the "RESP" prefix in order to proceed to the next course in the sequence. Any student failing a professional course (<75%) will not be allowed to continue in the program. The student may reapply for admission in the next program tract class. Students seeking readmission will be evaluated by the Respiratory Care faculty to determine acceptability and placement in the program. Previously completed professional courses may be accepted or may need to be repeated at the discretion of the faculty. This will depend upon the content, grade, credit hours earned and when the previous course was taken. Students who fail more than one Respiratory course or the same course twice will be dismissed from the program and will not be

re-accepted. Students who fail a clinical practicum must repeat both the clinical and classroom courses covering that content.

- Students must maintain a minimum cumulative 2.5 GPA to graduate from the program and Dalton State College.
- Students must abide by the policies and procedures of the Respiratory Therapy Handbook. Failure to do so may result in removal from the program.
- Prior to participation in practicum courses, students are required to submit medical examination forms. All required immunizations, including Hepatitis B, must be accompanied by documentation. A drug test at the expense of the student must be performed before clinical practicum participation is allowed.
- Conviction of a felony or gross misdemeanor may prohibit employment in field and may make a student ineligible to take licensing exams required for the profession. A background check is required before a student attends clinical practicum. The cost of the background check is the student's responsibility.
- Taking the Entry Level Certification Examination administered by the National Board for Respiratory Care may certify students. Upon successful completion of the Certification (CRT) exam, the graduate is eligible to take both parts of the Registry (RRT) Exams. To work in the state of Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license is to pass the Registry Level Exams.
- Please be advised that there may be additional costs for uniforms, equipment, testing, clinical fees, liability insurance, books, review courses, registry and other items as needed for a listing of these additional costs, please see an official in your program office.

# Respiratory Therapy Associate of Applied Science

This program is a five semester sequence. The program will allow students to achieve respiratory care skill sets mandated by the Committee on Accreditation of Respiratory Care (CoARC), and the Commission on Accreditation of Allied Health Education Programs. The curriculum is designed to prepare the graduate to function as an advanced level Respiratory Care Professional. After successful completion of the program, the graduate will be eligible to take the National Board for Respiratory Care (NBRC) entry-level exam, and upon successful completion of that examination, may then take the advanced level exam of the NBRC. Upon passing the entry-level exam and meeting all requirements for the Georgia State license, the graduate may be licensed in the state of Georgia as a Respiratory Care Professional by the Composite State Board of Medical Examiners of Georgia.

COMM 1110	Fundamentals of Speech	3
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
HIST 2111	United States History to 1877	3
or HIST 2112	United States Hist since 1877	
MATH 1111	College Algebra	3
POLS 1101	American Government	3
One of the following electives	3:	3
ECON 2105	Principles of Macroeconomics	
ECON 2106	Principles of Microeconomics	
HIST 1111	World Civilization to 1500 CE	
HIST 1112	World Civilization since 1500	

Total Hours		84
RESP 2330	Credential Preparation	1
RESP 2310	Cardiopulm Disease & Treatment	3
RESP 2220	Clinical Practicum III	5
RESP 2210	Clinical Practicum II	5
RESP 2201	Clinical Practicum IA	3
RESP 2130	Specialized Areas of Resp Care	2
RESP 2121	Neonatal/Pediatric Resp Care	2
RESP 2110	Mech Ventilation/Critical Care	4
RESP 1133	Cardiopulmonary Anatomy & Phys	3
RESP 1132	Cardiopulmonary Pharmacology	3
RESP 1131	Patient Assess & Protocols	4
RESP 1121	Clinical Practicum I	5
RESP 1111	Fundamentals of Resp Care	4
RESP 1100	Intro to Respiratory Care	3
or CHEM 1151K	Survey of Chemistry	·
CHEM 1211K	Principles of Chemistry I	4
BIOL 2260K	Microbiology	4
BIOL 2252K	Anatomy and Physiology II	4
BIOL 2251K	Anatomy and Physiology I	4
SOCI 1101	Introduction to Sociology	
PSYC 1101	Introduction to Psychology	
HIST 2112	United States Hist since 1877	
HIST 2111	United States History to 1877	

\*Respiratory Therapy majors are exempt from BIOL 1107K as a prerequisite for BIOL 2251K.

# 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

Respiratory Therapy

# 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 Cardioplumonary 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.