

## RESPIRATORY THERAPY

### Bachelor of Science

The Respiratory Therapy B.S. Completion Program is an online program for respiratory care practitioners who have completed an Associate of Science degree in Respiratory Therapy and are Registered Respiratory Therapists. The program would allow these therapists to obtain a Bachelor of Science degree in respiratory care while minimizing the duplication of knowledge and skills already acquired. The completion program is intended to offer the highest quality education that fosters critical thinking and encourages professional leadership and development. A respiratory therapist entering the program will acquire skills and knowledge above what is typically attained at the associate degree level. The comprehensive curriculum allows the student to become a successful communicator, critical thinker, and conscientious leader while encouraging life-long learning. Dalton State College and its degree programs are accredited by SACS.

### Area A: Essential Skills

- **ENGL 1101** English Composition I (3)
- **ENGL 1102** English Composition II (3)
- **MATH 1111** College Algebra (3)

### Area B: Institutional Options

- **COMM 1110** Fundamentals of Speech (3)

One of the following electives:
- **COMM 1120** Argumentation and Advocacy
- **ENGL 1105** Intro to Greek Mythology
- **ENGL 1110** Creative Writing
- **GEOG 1000** Natural Hazards
- **HIST 1051** Sports Hist & Amer Character
- **HLTH 1030** Health and Wellness Concepts
- **HUMN 1000** Mystery Fiction in Pop Culture
- **HUMN 1100** Political and Social Rhetoric
- **HUMN 1300** Christian Fiction/Pop Culture
- **SOCI 1000** Race and Ethnicity in America
- **PRSP Elective (See advisor)**

### Area C: Humanities/Fine Arts

Choose one to two ENGL course(s):

- **ENGL 2000** Topics in Literature & Culture (3-6)
- **ENGL 2111** World Literature I
- **ENGL 2112** World Literature II
- **ENGL 2120** British Literature I
- **ENGL 2121** British Literature II
- **ENGL 2130** American Literature I
- **ENGL 2131** American Literature II
- **ENGL 2201** Intro to Film as Literature

If only one ENGL course chosen, add one of the following:

- **ARTS 1100** Art Appreciation
- **HUMN 1201** Expressions of Culture I
- **HUMN 1202** Expressions of Culture II
- **MUSC 1100** Music Appreciation
- **MUSC 1120** American Music
- **THEA 1100** Theatre Appreciation

### Area D: Science/Mathematics/Technology

- **BIOL 1107K** Principles of Biology I (4)
- **BIOL 1108K** Principles of Biology II (4)
- **CHEM 1151K** Survey of Chemistry (4)
- **CHEM 1211K** Principles of Chemistry I

### Area E: Social Sciences

- **HIST 2111** United States History to 1877 (3)
- **HIST 2112** United States Hist since 1877
- **POLS 1101** American Government (3)

Choose two of the following electives:

- **ANTH 1103** Intro to Cultural Anthropology
- **ECON 2105** Principles of Macroeconomics
- **ECON 2106** Principles of Microeconomics
- **GEOG 1100** Introduction to Geography
- **GEOG 1111** Intro to Physical Geography
- **HIST 1111** World Civilization to 1500 CE
- **HIST 1112** World Civilization since 1500
- **HIST 2111** United States History to 1877
- **HIST 2112** United States Hist since 1877
- **PHIL 1103** Intro to World Religions
- **PHIL 2010** Intro to Philosophical Issues
- **PHIL 2020** Logic and Critical Thinking
- **POLS 2101** Intro to Political Science
- **POLS 2201** State and Local Government
- **POLS 2301** Comparative Politics
- **POLS 2401** International Relations
- **PSYC 1101** Introduction to Psychology
- **PSYC 2101** Psychology of Adjustment
- **PSYC 2103** Human Development
- **SOCI 1101** Introduction to Sociology
- **SOCI 1160** Social Problems

### Area F: Major Related

- **BIOL 2212K** Anatomy and Physiology I (4)
- **BIOL 2213K** Anatomy and Physiology II (4)
- **BIOL 2215K** Microbiology (4)
- **MATH 1401** Elementary Statistics (3)

Choose one or two of the following electives. Must add up to at least 3-4 credit hours.

- **BIOL 1224K** Entomology
- **BIOL 2270** Ethical Issues in Science
- **CHEM 1211K** Principles of Chemistry I
- **CHEM 1212K** Principles of Chemistry II
- **CHEM 2000** Scientific Communication
- **PHYS 1111K** Introductory Physics I
- **PSYC 2101** Psychology of Adjustment
- **PSYC 2103** Human Development

### Upper Level Requirements

- **RESP 4010** Adv Sem Neonatal/Peds Res Care (3)
- **RESP 4020** Adv Sem Critical Care/Mech Ven (3)
- **RESP 4110** Mentoring/Educ in Healthcare (3)
- **RESP 4120** Geriatrics/LT Respiratory Care (3)
- **RESP 4130** Research Healthcare Prof (3)
- **RESP 4140** Mngt in Cardiopulmonary Dept (3)
Prerequisites: Acceptance into the Respiratory Program.

Resuscitation will be expected of the student during this course. The respiratory profession will be developed. Mastery of Cardiopulmonary processes outlined. Specific terminology and abbreviations needed by therapists will be presented. The functions of the NBRC, AARC, CoARC, and the Georgia particularly Respiratory Care, in today's Health Care environment. An overview of legal and ethical issues impacting Health Care, and an introduction to Therapist driven protocols and clinical practice guidelines, a discussion of job opportunities and areas for advancement within the profession, the future of Respiratory Care, a description of the organization of a hospital Respiratory Care department, an overview of common 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.

**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.
Corequisites: 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 taking a complete patient medical history. Principles of barrier protection for blood and body fluid exposures, and isolation precautions will be emphasized. Basic chest x-ray interpretation, basic ECG monitoring, basic laboratory values such as CBC, electrolytes, and basic microbiology are presented. Assessment of critically ill patients is introduced. Each student will be required to successfully complete a Lab competency examination in order to progress to RESP 1121.

Prerequisites: Admission into Respiratory Care program RESP 1100 is required as a prerequisite or a co-requisite.
Corequisites: RESP 1111.

**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 trachectomy care. Concepts of mechanical ventilation are presented. Other critical care skills such as arterial lines, hemodynamic monitoring, advanced patient monitoring, bronchoscopy, and trachectomy 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.
Prerequisites: RESP 1121, RESP 1132, RESP 1133.
Corequisites: RESP 2310.

RESP 2121. Neonatal/Pediatric Resp Care. 2-0-2 Units.
This course presents the physiological and clinical concepts of mechanical ventilation and critical care monitoring of the pediatric and neonatal patient. The course focuses on respiratory care modalities and concepts specifically related to the pediatric and neonatal patient. Some topics include: ventilator design and function, assessment and monitoring of pediatric/neonatal patients, techniques for improving ventilation oxygenation, weaning strategies, and labor and delivery. Critical thinking skills will be emphasized to support the application of neonatal/pediatric physician and therapist driven protocols.
Prerequisites: RESP 2110, RESP 2310.
Corequisites: RESP 2210, RESP 2210, RESP 2210, 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. Students will apply the knowledge learned in this course in Practicum III RESP 2201. Clinical Practicum IA 0-11-3Corequisites: RESP 2110, RESP 2310. This course is a continuation of Clinical Practicum I and a bridge to Clinical Practicum II. Students will be required to present evidence based case studies in specialty areas.
Prerequisites: RESP 2110, RESP 2310.
Corequisites: RESP 2210, RESP 2220.

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. Students will be required to present clinical case studies on major cardiopulmonary pathologies in conjunction with studies in RESP 2310.
Prerequisites: RESP 1121, RESP 2110, RESP 2310.

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.
Prerequisites: Current CPR, RESP 1121, RESP 2201.
Corequisites: RESP 2121, RESP 2130.

RESP 2220. Clinical Practicum III. 0-16-5 Units.
PRACTICUM to support content presented in RESP 2121 and RESP 2310. 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 advanced 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.
Corequisites: RESP 2321, RESP 2330.

RESP 2310. Cardiopulmonary 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. Student will be required to present clinical case studies on the major cardiopulmonary pathologies.
Prerequisites: RESP 1121, RESP 1132, RESP 1133.
Corequisites: RESP 2110.

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 2310, 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 in the intensive care setting. Students will increase their knowledge base in assessment, evaluation, identification, utilization of critical skills, and procedures used in the neonatal/pediatric critical care setting. This course will provide the student with a general review of perinatal/pediatric respiratory care as applicable to the National Board for Respiratory Care Neonatal/Pediatric Specialty credentialing examination.
Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.

RESP 4020. Adv Sem Critical Care/Mech Vent. 3-0-3 Units.
This course reviews relevant material to prepare the student for the ACCS Exam. Particular focus includes airway management, advanced modes of mechanical ventilation, pharmacology and respiratory diseases and disorders.
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 complete course to become certified in Pulmonary Disease Educator.
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. An overview of concepts, procedures, in geriatrics and long-term care will be presented. Students will discover how the respiratory therapist’s role is impacted interacting between the acute care facility, sub-acute care sites and self-administered care in the patient’s home.
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 in a variety of clinical facilities ranging from acute to long-term care. Beyond basic principles of management, this course will explore the responsibilities of the Cardiopulmonary Department manager including appointment, direction and evaluation of personnel; policy and procedure development; budget and fiscal planning; and negotiation of purchase and contracts for new equipment.
Prerequisites: RRT Credential and acceptance into the Bachelor of Science program.