

# RCT3 Respiratory Care ( version 201412 ) - Degree ( replaces RE03 )

## Program Information

<i>Program Name</i> <b>Respiratory Care</b>	<i>Non-Occupational Program</i> <b>No</b>	<i>Program Development</i> <b>Standard</b>
<i>Program Version</i> <b>201412</b>	<i>Program Award Level</i> <b>Associate of Applied Science</b>	<i>Program Credit Hours</i> <b>78</b>
<i>Program Length</i> <b>6 Terms</b>	<i>PAS Program Group</i> <b>1040 Respiratory Therapy Technology</b>	<i>CIP Code</i> <b>510908 Respiratory Care Therapy</b>

## Justification

### Program Description

The respiratory care associate degree is a sequence of courses that prepares students for careers in the field of respiratory care. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in areas such as pulmonary and cardiac pharmacology, medical gases, humidity/aerosol therapy, positive pressure ventilation, incentive spirometry, patient assessment, postural drainage, percussion/vibration, assessment of diseases and conditions, critical respiratory care, advanced critical care monitoring, pulmonary function testing, and pediatric and neonatal respiratory care. Program graduates receive a respiratory care associate degree, qualifying them to take the examinations to become a Registered Respiratory Therapist. Students may become certified by taking the Entry Level Certification Examination administered by the National Board for Respiratory Care. Upon successfully completing the Certification (CRT) Exam, the graduate is eligible to take both parts of the Registry (RRT) Exams. To work in Georgia, all respiratory care practitioners must apply and be granted a license. The only way to obtain a license is to pass at least the Entry Level Certification Exam.

### Occupational Trends

Job opportunities are expected to be very good, especially for those with a degree and certification and those with cardiopulmonary care skills or experience working with infants. The vast majority of job openings will continue to be in hospitals. However, a growing number of job openings are expected to be outside of hospitals, especially within in-home healthcare services, offices of physicians or other health practitioners, consumer-goods rental firms, or in the employment services industry as temporary workers in various settings.

### Education Programs

An associate degree is required to become a respiratory therapist. Colleges and universities, medical schools, vocational-technical institutes, and the Armed Forces offer training at the postsecondary level. Most programs award associate or bachelor's degrees and prepare graduates for jobs as advanced respiratory therapists. A license is required to practice as a respiratory therapist, except in Alaska and Hawaii. Also, most employers require respiratory therapists to maintain a cardiopulmonary resuscitation (CPR) certification. Licensure is usually based, in large part, on meeting the requirements for certification from the National Board for Respiratory Care (NBRC). The board offers the Certified Respiratory Therapists (CRT) credential to those who graduate from entry-level or advanced programs accredited by the Commission on Accreditation for Respiratory Care (CoARC) and who also pass an exam. The board also awards the Registered Respiratory Therapist (RRT) to CRTs who have graduated from advanced programs and passed two separate examinations. Supervisory positions and intensive-care specialties usually require the RRT.

### Actual Job/Career

Respiratory Therapists evaluate, treat, and care for patients with breathing or other cardiopulmonary disorders. Practicing under the direction of a physician, respiratory therapists assume primary responsibility for all respiratory care treatments and diagnostic procedures. They consult physicians and other healthcare staff to help develop and modify patient care plans. Therapists also provide complex therapy requiring considerable independent judgment, such as caring for patients on life support in intensive-care units of hospitals. Respiratory Therapists evaluate and treat all types of patients, ranging from premature infants whose lungs are not fully developed to elderly people whose lungs are diseased. They provide temporary relief to patients with chronic asthma or emphysema and give emergency care to patients who are victims of a heart attack, stroke, drowning, or shock.

### Employment Trends

## Salary Trends

<i>Hourly Salary</i>	\$30.20
<i>Annual Salary</i>	\$62,816.00

<i>Salary Trend Details</i>	According to the EMSI reports, the 2020 median wage in Georgia for Respiratory Therapists was \$57,378, and the national medical wage was \$62,816.
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## Occupational Analysis

### *Duty Order Duty Description*

#### **1 Provide Customer Service**

<i>Task Order</i>	<i>Task Description</i>
1	Greet Patient
2	Explain Medical Procedure
3	Address patient Grievances

#### **2 Administer Medical Gases**

<i>Task Order</i>	<i>Task Description</i>
1	Perform oxygen therapy
2	Administer nitric oxide
3	Perform hyperbaric

#### **3 Perform Blood Gas Testing**

<i>Task Order</i>	<i>Task Description</i>
1	Obtain blood sample
2	Perform blood analysis
3	Validate blood gas results

#### **4 Validate blood gas results**

<i>Task Order</i>	<i>Task Description</i>
1	Perform pulmonary function studies
2	Perform methacholine challenge
3	Perform pulmonary stress test

#### **5 Maintain Professional Competency**

<i>Task Order</i>	<i>Task Description</i>
1	Maintain life support certifications (e.g. , ACLS, PALS, NRP)
2	Maintain professional credentials
3	Maintain professional license

## Program Outcomes

<i>Order</i>	<i>Description</i>
1	The student will be able to demonstrate the knowledge necessary for the role of the Respiratory Therapist.
2	The student will be able to demonstrate the skills and attitudes needed to maintain professional and technical competence.
3	The student will demonstrate the ability to think abstractly, reason logically, and apply problem-solving skills in the practice of Respiratory Care.

- 4 The student will be able to perform cardiopulmonary diagnostic procedures, patient assessments, and respiratory care planning.
- 5 The student will be able to assist the physician in special procedures of cardiopulmonary care.

## Curriculum

### RCT3 Respiratory Care ( version 201412)

Name	Relation	Lect Credit Hrs	Lab Credit Hrs	Total Credit Hrs	Lect Cont Hrs	Regu lar Lab Type	Reg. Lab Cont Hrs	Othe r Lab Type	Oth. Lab Cont Hrs	Total Cont Hrs	Smst Hrs
General Education Core (Required minimum: 15 Semester hours)	AND	-	-	-	-		-		-	-	16
Area I - Language Arts/Communications (3 hrs)	OR	-	-	-	-		-		-	-	3
<u>ENGL 1101 - Composition and Rhetoric (201003) 3 hrs</u>	NA	3	0	3	3		0		0	3	3
<u>COMM 1100 - Human Communication (201712) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>SPCH 1101 - Public Speaking (201003) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
Area II - Social/Behavioral Sciences (3hrs)	OR	-	-	-	-		-		-	-	3
<u>ECON 1101 - Principles of Economics (201003) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>ECON 2105 - Macroeconomics (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>ECON 2106 - Microeconomics (201003) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>HIST 1111 - World History I to 1500 (201003) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>HIST 1112 - World History II since 1500 (201003) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>HIST 2111 - U.S. History I to 1877 (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>HIST 2112 - U.S. History II since 1865 (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>POLS 1101 - American Government (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>POLS 2401 - Global Issues (201216) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>PSYC 1101 - Introductory Psychology (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
<u>SOCI 1101 - Introduction to Sociology (201312) 3 hrs</u>	OR	3	0	3	3		0		0	3	3
Area III - Natural Sciences/Mathematics (7hrs)	SELECT	-	-	-	-		-		-	-	7
Mathematics (3hrs)	OR	-	-	-	-		-		-	-	3

<u>MATH 1101 - Mathematical Modeling (201003) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	
<u>MATH 1111 - College Algebra (201312) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	
<u>MATH 1103 - Quantitative Skills and Reasoning (201614) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	
<u>MATH 1113 - Precalculus (201003) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>MATH 1127 - Introduction to Statistics (201003) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>MATH 1131 - Calculus I (201312) 4 hrs</u>	OR	4	0	4	4	0	0	4	4	
Chemistry & Chemistry Lab (4hrs)	SELECT	-	-	-	-	-	-	-	4	
<u>CHEM 1151 - Survey of Inorganic Chemistry (201003) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	
<u>CHEM 1151L - Survey of Inorganic Chemistry Lab (201003) 1 hrs</u>	NA	0	1	1	0	0	Lab	3	3	1
<u>CHEM 1211 - Chemistry I (201003) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	
<u>CHEM 1211L - Chemistry Lab I (201003) 1 hrs</u>	NA	0	1	1	0	0	Lab	3	3	1
Area IV Humanities/Fine Arts (3hrs)	OR	-	-	-	-	-	-	-	3	
<u>ARTS 1101 - Art Appreciation (201312) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>ENGL 2110 - World Literature (201714) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>ENGL 2130 - American Literature (201003) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>ENGL 2310 - English Literature from the Beginnings to 1700 (201714) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>HUMN 1101 - Introduction to Humanities (201312) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>MUSC 1101 - Music Appreciation (201312) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>RELG 1101 - World Religions (201512) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
<u>THEA 1101 - Theater Appreciation (201216) 3 hrs</u>	OR	3	0	3	3	0	0	3	3	
Non-General Education Degree Courses (12hrs)	AND	-	-	-	-	-	-	-	12	
<u>BIOL 2113 - Anatomy and Physiology I (201003) 3 hrs</u>	NA	3	0	3	3	0	0	3	3	

<u>BIOL 2113L - Anatomy and Physiology Lab I (201003) 1 hrs</u>	NA	0	1	1	0		0	Lab	3	3	1
<u>BIOL 2114 - Anatomy and Physiology II (201003) 3 hrs</u>	NA	3	0	3	3		0		0	3	3
<u>BIOL 2114L - Anatomy and Physiology Lab II (201003) 1 hrs</u>	NA	0	1	1	0		0	Lab	3	3	1
<u>BIOL 2117 - Introductory Microbiology (201003) 3 hrs</u>	NA	3	0	3	3		0		0	3	3
<u>BIOL 2117L - Introductory Microbiology Lab (201003) 1 hrs</u>	NA	0	1	1	0		0	Lab	3	3	1
Occupational Courses	AND	-	-	-	-		-		-	-	50
<u>RESP 1110 - Pharmacology (201003) 3 hrs</u>	NA	2	1	3	2	Lab	2		0	4	3
<u>RESP 2090 - Clinical Practice I (201003) 2 hrs</u>	NA	0	2	2	0		0	Clinical	6	6	2
<u>RESP 2110 - Pulmonary Disease (201003) 3 hrs</u>	NA	2	1	3	2	Lab	2		0	4	3
<u>RESP 1193 - Cardiopulmonary Anatomy and Physiology (201512) 4 hrs</u>	NA	2	2	4	2	Lab	4		0	6	4
<u>RESP 1120 - Introduction to Respiratory Therapy (201003) 3 hrs</u>	NA	2	1	3	2	Lab	2		0	4	3
<u>RESP 1130 - Respiratory Therapy Lab I (201003) 4 hrs</u>	NA	0	4	4	0	Lab	8		0	8	4
<u>RESP 2100 - Clinical Practice II (201003) 2 hrs</u>	NA	0	2	2	0		0	Clinical	6	6	2
<u>RESP 2180 - Clinical Practice III (201003) 2 hrs</u>	NA	0	2	2	0		0	Clinical	6	6	2
<u>RESP 2140 - Advanced Critical Care Monitoring (201003) 1 hrs</u>	NA	0	1	1	0	Lab	2		0	2	1
<u>RESP 2120 - Critical Respiratory Care (201512) 2 hrs</u>	NA	1	1	2	1	Lab	2		0	3	2
<u>RESP 2130 - Mechanical Ventilation and Airway Management (201003) 4 hrs</u>	NA	0	4	4	0	Lab	8		0	8	4
<u>RESP 2160 - Neonatal Pediatric Respiratory Care (201003) 3 hrs</u>	NA	2	1	3	2	Lab	2		0	4	3
<u>RESP 2190 - Clinical Practice IV (201003) 2 hrs</u>	NA	0	2	2	0		0	Clinical	6	6	2
<u>RESP 2200 - Clinical Practice V (201003) 3 hrs</u>	NA	0	3	3	0		0	Clinical	9	9	3
<u>RESP 2150 - Pulmonary Function Testing (201003) 1 hrs</u>	NA	0	1	1	0	Lab	2		0	2	1
<u>RESP 2170 - Advanced Respiratory Care Seminar (201003) 3 hrs</u>	NA	1	2	3	1	Lab	4		0	5	3

<u>RESP 2270 - Rehabilitation and Home Care</u> <u>(201003) 1 hrs</u>	NA	0	1	1	0	Lab	2		0	2	1
<u>RESP 2220 - Clinical Practice VI (201003) 7 hrs</u>	NA	0	7	7	0		0	Clinical	21	21	7

**Total Credit Hours: 78**

## External Standards

### *Order Description*

- 1 CoARC -Commission on Accreditation for Respiratory Care
- 2 In the Respiratory Care program, Practicum/Internship or Clinical courses are based on a clock hour (sixty minutes). Appropriate breaks are included in the clock hour as directed at the Practicum/Internship or Clinical site. One semester credit shall be awarded for a minimum of three clock hours of Practicum/Internship. One hour of credit shall be awarded for 2250 minutes of instructional time.

## Admissions Requirements

### *Minimum Test Scores*

Accuplacer Reading Comp.	64
Accuplacer Sentence Skills	70
Accuplacer Arithmetic	34
Accuplacer Elementary Algebra	57
Accuplacer College Level Math	N/A

### *Minimum Required Age*

NA

### *High School Diploma or GED Required*

For Admission: Yes  
For Graduation: Yes

### *Other Admission Conditions*

achievement of minimum regular admission scores on tests of reading, language, and math as specified in GDТАЕ document Minimum Program Entrance Scores;

## Program Faculty/Administrative Requirements

<i>Order</i>	<i>Description</i>	<i>Type</i>	<i>Quantity</i>
1	Program Director	Full time	1
2	Director of Clinical Education	Full time	1

### *Other Specific Staff Resources*

## Program Resources/Equipment/Facilities

Nebulizers Nebulizers, babbington Nebulizers, electrical Nebulizers, large vol. medication Nebulizers, small vol. medication Rotahaler Self-propelled cartridge type (metered dose inhaler) Spinhaler (dry powder aerosol) Airways/Airway Adjuncts and Accessories Adhesive tape CO2 monitoring device Cricothyrotomy emergency kits, adult and pediatric Cuff pressure manometer Endotracheal tubes (all sizes), adult and pediatric Endotracheal and tracheotomy ties Esophageal obstructer airways Esophagotracheal combative Fiberoptic laryngoscope Intubation equipment Nasopharyngeal airways Oropharyngeal airway, Berman Oropharyngeal airway, guedel Oxygen appliances, adult and pediatric Portable suction device, electric Racine adapters S-tubes Suction catheters, adult and pediatric Syringes Trach buttons, varied sizes Tracheotomy care kits Tracheotomy tubes, adult and pediatric Twill tape Yankauer suction device Analogs, Lung and Cardiac Arrhythmia simulator Blood pressure simulator Breath sound simulator Heart sound simulator Hemodynamic simulator Mechanical test lung w/variable resistance and compliance Respiratory/cardiac simulator Resuscitation simulator, defibrillator Test lungs Analytical Equipment Barometer Blood gas analyzer Calibrated laboratory type flow meter Calibrated super syringe Hematocrit centrifuge Laboratory grade mercurial thermometers Mercurial manometers Meter sticks Oncometer Sling psychrometer or dry bulb-wet bulb Hygrometer Stopwatches Water manometers Water-sealed spirometer (w/kymograph for flow determination) Breathing Adjuncts Expiratory resistance systems Incentive spirometers Calibration, Repair, and Maintenance Equipment Air compressors Air/oxygen blender Assorted cylinder sizes (E and H minimum) Cylinder carts (E and H minimum) Demand valve w/high pressure delivery tubing Downs flow generator Flow meters for air and oxygen High pressure delivery tubing/male/female combinations for 1. Laboratory with at least 2 deep basin sinks 2. Piped in compressed air with wall outlets to accommodate at least 8-10 stations. Outlets must be mounted high enough from counter top to allow for flow meter with high output nebulizer 3. Classroom with individual desk/table to accommodate students.. Dry Erase boards, computer with LCD projector and screen 4. Patient stations similar to those found in hospitals 5. Piped in oxygen with wall outlets to accommodate at least 8-10 stations. Outlets must be mounted high enough from counter top to allow for flow meter with high output nebulizer 6. Electrical outlets and circuit breakers to handle multiple ventilators running simultaneously. At least a quad electrical box every 4 ft. with appropriate circuit breakers to handle load 7. Cabinet and drawer space for storage 8. Storage room with adequate shelving, filing cabinets and cabinets to store equipment when not in use 9. Tables in the lab to accommodate at least 20 students 10. Computer lab with at least 20 computers loaded with simulations for 3 CRT, 3 WRRT, 3 Mock Clinical Simulator's. Enough for each student in the program to test on simultaneously 11. X-ray view box 12. Bulletin board 1. Uniform as required by the College 2. Stethoscope 3. Scissors 4. Lab equipment such as assorted facemask, O2 delivery devices, circuits, mouth pieces as determined by the program 5. Pen light 6. Lab Coat 7. Mandatory Criminal Background screen 8. Hemostats 9. Appropriate textbooks as determined by the program 10. Physical after being accepted into the program 11. Appropriate vaccinations as required by the hospitals 12. Mandatory Drug screen Describe any required facilities 1. Laboratory with at least 2 deep basin sinks 2. Piped in compressed air with wall outlets to accommodate at least 8-10 stations. Outlets must be mounted high enough from counter top to allow for flow meter with high output nebulizer 3. Classroom with individual desk/table for at least 20 students. Dry Erase boards, computer with LCD projector and screen 4. Patient stations similar to those found in hospitals 5. Piped in oxygen with wall outlets to accommodate at least 8-10 stations. Outlets must be mounted high enough from counter top to allow for flow meter with high output nebulizer 6. Electrical outlets and circuit breakers to handle multiple ventilators running simultaneously. At least a quad electrical box every 4 ft. with appropriate circuit breakers to handle load 7. Cabinet and drawer space for storage 8. Storage room with adequate shelving, filing cabinets and cabinets to store equipment when not in use 9. Tables in the lab to accommodate at least 20 students 10. Computer lab with at least 20 computers loaded with simulations for 3 CRT, 3 WRRT, 3 Mock Clinical Simulator's. Enough for each student in the program to test on simultaneously 11. X-ray view box 12. Bulletin board