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

Program Information

Program Name
Respiratory Care

Non-Occupational Program
No

Program Development
Standard

Program Version
201412

Program Award Level
Associate of Applied Science

Program Credit Hours
78

Program Length
6 Terms

PAS Program Group
1040 Respiratory Therapy Technology

CIP Code
510908 Respiratory Care Therapy

SOC Code
291126 Respiratory Therapists

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

Hourly Salary	$30.20
Annual Salary	$62,816.00
Salary Trend Details	According to the EMSI reports, the 2020 median age in Georgia for Respiratory Therapists was $57,378, and the national medical wage was $62,816.

Occupational Analysis

Duty Order *Duty Description*

1 Provide Customer Service

Task Order	*Task Description*
1	Greet Patient
2	Explain Medical Procedure
3	Address patient Grievances

2 Administer Medical Gases

Task Order	*Task Description*
1	Perform oxygen therapy
2	Administer nitric oxide
3	Perform hyperbaric

3 Perform Blood Gas Testing

Task Order	*Task Description*
1	Obtain blood sample
2	Perform blood analysis
3	Validate blood gas results

4 Validate blood gas results

Task Order	*Task Description*
1	Perform pulmonary function studies
2	Perform methacholine challenge
3	Perform pulmonary stress test

5 Maintain Professional Competency

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

Program Outcomes

Order	*Description*
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	Regular Lab Type	Reg. Lab Cont Hrs	Other 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
ENGL 1101 - Composition and Rhetoric (201003) 3 hrs	NA	3	0	3	3		0		0	3	3
COMM 1100 - Human Communication (201712) 3 hrs	OR	3	0	3	3		0		0	3	3
SPCH 1101 - Public Speaking (201003) 3 hrs	OR	3	0	3	3		0		0	3	3
Area II - Social/Behavioral Sciences (3hrs)	OR	-	-	-	-		-		-	-	3
ECON 1101 - Principles of Economics (202512) 3 hrs	OR	3	0	3	3		0		0	3	3
ECON 2105 - Macroeconomics (201312) 3 hrs	OR	3	0	3	3		0		0	3	3
ECON 2106 - Microeconomics (201003) 3 hrs	OR	3	0	3	3		0		0	3	3
HIST 1111 - World History I to 1500 (201003) 3 hrs	OR	3	0	3	3		0		0	3	3
HIST 1112 - World History II since 1500 (201003) 3 hrs	OR	3	0	3	3		0		0	3	3
HIST 2111 - U.S. History I to 1877 (201312) 3 hrs	OR	3	0	3	3		0		0	3	3
HIST 2112 - U.S. History II since 1865 (201312) 3 hrs	OR	3	0	3	3		0		0	3	3
POLS 1101 - American Government (201312) 3 hrs	OR	3	0	3	3		0		0	3	3
POLS 2401 - Global Issues (201216) 3 hrs	OR	3	0	3	3		0		0	3	3
PSYC 1101 - Introductory Psychology (201312) 3 hrs	OR	3	0	3	3		0		0	3	3

SOCI 1101 - Introduction to Sociology (201312) 3 hrs	OR	3	0	3	3	0		0	3	3
Area III - Natural Sciences/Mathematics (7hrs)	SELECT	-	-	-	-	-		-	-	7
Mathematics (3hrs)	OR	-	-	-	-	-		-	-	3
MATH 1101 - Mathematical Modeling (201003) 3 hrs	NA	3	0	3	3	0		0	3	3
MATH 1111 - College Algebra (201312) 3 hrs	NA	3	0	3	3	0		0	3	3
MATH 1103 - Quantitative Skills and Reasoning (201614) 3 hrs	NA	3	0	3	3	0		0	3	3
MATH 1113 - Precalculus (201003) 3 hrs	OR	3	0	3	3	0		0	3	3
MATH 1127 - Introduction to Statistics (201003) 3 hrs	OR	3	0	3	3	0		0	3	3
MATH 1131 - Calculus I (201312) 4 hrs	OR	4	0	4	4	0		0	4	4
Chemistry & Chemistry Lab (4hrs)	SELECT	-	-	-	-	-		-	-	4
CHEM 1151 - Survey of Inorganic Chemistry (201003) 3 hrs	NA	3	0	3	3	0		0	3	3
CHEM 1151L - Survey of Inorganic Chemistry Lab (201003) 1 hrs	NA	0	1	1	0	0	Lab	3	3	1
CHEM 1211 - Chemistry I (201003) 3 hrs	NA	3	0	3	3	0		0	3	3
CHEM 1211L - Chemistry Lab I (201003) 1 hrs	NA	0	1	1	0	0	Lab	3	3	1
Area IV Humanities/Fine Arts (3hrs)	OR	-	-	-	-	-		-	-	3
ARTS 1101 - Art Appreciation (201312) 3 hrs	OR	3	0	3	3	0		0	3	3
ENGL 2110 - World Literature (201714) 3 hrs	OR	3	0	3	3	0		0	3	3
ENGL 2130 - American Literature (201003) 3 hrs	OR	3	0	3	3	0		0	3	3
ENGL 2310 - English Literature from the Beginnings to 1700 (201714) 3 hrs	OR	3	0	3	3	0		0	3	3
HUMN 1101 - Introduction to Humanities (201312) 3 hrs	OR	3	0	3	3	0		0	3	3
MUSC 1101 - Music Appreciation (201312) 3 hrs	OR	3	0	3	3	0		0	3	3
RELG 1101 - World Religions (201512) 3 hrs	OR	3	0	3	3	0		0	3	3
THEA 1101 - Theater Appreciation (201216) 3 hrs	OR	3	0	3	3	0		0	3	3

Non-General Education Degree Courses (12hrs)	AND	-	-	-	-		-		-	-	12
BIOL 2113 - Anatomy and Physiology I (201003) 3 hrs	NA	3	0	3	3		0		0	3	3
BIOL 2113L - Anatomy and Physiology Lab I (201003) 1 hrs	NA	0	1	1	0		0	Lab	3	3	1
BIOL 2114 - Anatomy and Physiology II (201003) 3 hrs	NA	3	0	3	3		0		0	3	3
BIOL 2114L - Anatomy and Physiology Lab II (201003) 1 hrs	NA	0	1	1	0		0	Lab	3	3	1
BIOL 2117 - Introductory Microbiology (201003) 3 hrs	NA	3	0	3	3		0		0	3	3
BIOL 2117L - Introductory Microbiology Lab (201003) 1 hrs	NA	0	1	1	0		0	Lab	3	3	1
Occupational Courses	AND	-	-	-	-		-		-	-	50
RESP 1110 - Pharmacology (201003) 3 hrs	NA	2	1	3	2	Lab	2		0	4	3
RESP 2090 - Clinical Practice I (201003) 2 hrs	NA	0	2	2	0		0	Clinical	6	6	2
RESP 2110 - Pulmonary Disease (201003) 3 hrs	NA	2	1	3	2	Lab	2		0	4	3
RESP 1193 - Cardiopulmonary Anatomy and Physiology (201512) 4 hrs	NA	2	2	4	2	Lab	4		0	6	4
RESP 1120 - Introduction to Respiratory Therapy (201003) 3 hrs	NA	2	1	3	2	Lab	2		0	4	3
RESP 1130 - Respiratory Therapy Lab I (201003) 4 hrs	NA	0	4	4	0	Lab	8		0	8	4
RESP 2100 - Clinical Practice II (201003) 2 hrs	NA	0	2	2	0		0	Clinical	6	6	2
RESP 2180 - Clinical Practice III (201003) 2 hrs	NA	0	2	2	0		0	Clinical	6	6	2
RESP 2140 - Advanced Critical Care Monitoring (201003) 1 hrs	NA	0	1	1	0	Lab	2		0	2	1
RESP 2120 - Critical Respiratory Care (201512) 2 hrs	NA	1	1	2	1	Lab	2		0	3	2
RESP 2130 - Mechanical Ventilation and Airway Management (201003) 4 hrs	NA	0	4	4	0	Lab	8		0	8	4
RESP 2160 - Neonatal Pediatric Respiratory Care (201003) 3 hrs	NA	2	1	3	2	Lab	2		0	4	3
RESP 2190 - Clinical Practice IV (201003) 2 hrs	NA	0	2	2	0		0	Clinical	6	6	2
RESP 2200 - Clinical Practice V (201003) 3 hrs	NA	0	3	3	0		0	Clinical	9	9	3
RESP 2150 - Pulmonary Function Testing (201003) 1 hrs	NA	0	1	1	0	Lab	2		0	2	1

RESP 2170 - Advanced Respiratory Care Seminar (201003) 3 hrs	NA	1	2	3	1	Lab	4		0	5	3
RESP 2270 - Rehabilitation and Home Care (201003) 1 hrs	NA	0	1	1	0	Lab	2		0	2	1
RESP 2220 - Clinical Practice VI (201003) 7 hrs	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 GDTAE document Minimum Program Entrance Scores;

Program Faculty/Administrative Requirements

Order	*Description*	*Type*	*Quantity*
1	Program Director	Full time	1
2	Clinical Coordinator	Full time	1

Other Specific Staff Resources

Program Resources/Equipment/Facilities

NebulizersNebulizers, babbingtonNebulizers, electrical Nebulizers, large vol. medication Nebulizers, small vol. medication RotahalerSelf-propelled cartridge type (metered dose inhaler)Spinhaler (dry powder aerosol)Airways/Airway Adjuncts and AccessoriesAdhesive tapeCO2 monitoring deviceCricothyrotomy emergency kits, adult and pediatric Cuff pressure manometerEndotracheal tubes (all sizes), adult and pediatricEndotracheal and tracheotomy tiesEsophageal obstructer airwaysEsophagotracheal combativeFiberoptic laryngoscopeIntubation equipmentNasopharyngeal airwaysOropharyngeal airway, BermanOropharyngeal airway, guedelOxygen appliances, adult and pediatricPortable suction device, electricRacine adaptersS-tubesSuction catheters, adult and pediatricSyringesTrach buttons, varied sizesTracheotomy care kitsTracheotomy tubes, adult and pediatric Twill tapeYankauer suction deviceAnalogs, Lung and CardiacArrhythmia simulatorBlood pressure simulatorBreath sound simulatorHeart sound simulatorHemodynamic simulatorMechanical test lung w/variable resistance and complianceRespiratory/cardiac simulatorResuscitation simulator, defibrillatorTest lungsAnalytical EquipmentBarometerBlood gas analyzerCalibrated laboratory type flow meterCalibrated super syringeHematocrit centrifugeLaboratory grade mercurial thermometersMercurial manometersMeter sticksOncometerSling psychrometer or dry bulb-wet bulb HygrometerStopwatchesWater manometersWater-sealed spirometer (w/kymograph for flow determination)Breathing AdjunctsExpiratory resistance systemsIncentive spirometersCalibration, Repair, and Maintenance EquipmentAir compressorsAir/oxygen blenderAssorted cylinder sizes (E and H minimum)Cylinder carts (E and H minimum)Demand valve w/high pressure delivery tubingDowns flow generatorFlow meters for air and oxygenHigh pressure delivery tubing/male/female combinations fo 1.Laboratory with at least 2 deep basin sinks2.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 nebulizer3.Classroom with individual desk/table to accommodate students.. Dry Erase boards, computer with LCD projector and screen4.Patient stations similar to those found in hospitals5.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 nebulizer6.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 load7.Cabinet and drawer space for storage8.Storage room with adequate shelving, filing cabinets and cabinets to store equipment when not in use9.Tables in the lab to accommodate at least 20 students10.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 simultaneously11.X-ray view box12.Bulletin board 1.Uniform as required by the College2.Stethoscope3.Scissors4.Lab equipment such as assorted facemask, O2 delivery devices, circuits, mouth pieces as determined by the program5.Pen light6.Lab Coat7.Mandatory Criminal Background screen8.Hemostats9.Appropriate textbooks as determined by the program10.Physical after being accepted into the program11.Appropriate vaccinations as required by the hospitals12.Mandatory Drug screenDescribe any required facilities1.Laboratory with at least 2 deep basin sinks2.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 nebulizer3.Classroom with individual desk/table for at least 20 students. Dry Erase boards, computer with LCD projector and screen4.Patient stations similar to those found in hospitals5.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 nebulizer6.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 load7.Cabinet and drawer space for storage8.Storage room with adequate shelving, filing cabinets and cabinets to store equipment when not in use9.Tables in the lab to accommodate at least 20 students10.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 simultaneously11.X-ray view box12.Bulletin board