

08/27/18 - Addendum to the 2018-2019 College Catalog and Handbook in the Career Programs Section.

Respiratory Therapy

***Program only offered at the Shelby-Hoover Campus**

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Respiratory care, also known as respiratory therapy, is a profession that specializes in providing care to patients who have illnesses that affect heart and lung function. Respiratory therapists are uniquely qualified to assist in diagnosing, treating, and managing acute and chronic cardiopulmonary disorders. The Respiratory Therapy Program will prepare individuals, under the supervision of physicians, to assist in developing respiratory care plans, administer respiratory care procedures, supervise personnel and equipment operation, maintain records, and consult with other health care team members. Includes instruction in the applied basic biomedical sciences; anatomy, physiology, and pathology of the respiratory system; clinical medicine; therapeutic procedures; clinical expressions; data collection and record keeping; patient communication; equipment operation and maintenance; personnel supervision; and procedures for special population groups.

Mission/Purpose/Goals

To prepare students as competent registry-level respiratory therapists through a comprehensive didactic, laboratory and clinical curriculum following the accreditation requirements of CoARC.

PROGRAM GOAL

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by Registered Respiratory Therapist (RRT).

PROGRAM MISSION

Upon completion of the program, graduates will demonstrate:

1. The ability to comprehend, apply and evaluate information relevant to their role as an advanced respiratory therapist. (Cognitive domain)
2. The technical proficiency in all skills necessary to fulfill their role as an advanced respiratory therapist. (Psychomotor domain)
3. Personal behaviors consistent with professional and employer expectations as an advanced respiratory therapist. (Affective domain)

Approvals and Accreditation

The Jefferson State Community College Respiratory Therapy Program, CoARC program number 200634, awarding an Associate in Applied Science Degree in Respiratory Therapy, at the Jefferson State Shelby-Hoover Campus, holds Provisional Accreditation from the Commission on Accreditation for Respiratory Care (www.coarc.com). This status signifies that a program with an Approval of Intent has demonstrated sufficient compliance with the Standards (through submission of an acceptable Provisional Accreditation Self Study Report (PSSR) and any other documentation required by the CoARC, as well as satisfactory completion of an initial on-site visit), to be allowed to admit students. It is recognized as an accredited program by the National Board for Respiratory Care (NBRC), which provides enrolled students who complete the program with eligibility for the Respiratory Care Credentialing Examination(s). The program will remain on Provisional Accreditation until it achieves Continuing Accreditation.

Commission on Accreditation for Respiratory Care (CoArc)
1248 Harwood Road
Bedford, TX 76021-4244
817-283-2835

Admission Procedures/Requirements

A limited number of students are admitted to the program because of a specific number of clinical spaces available. Students should contact the pre-nursing and allied health advisor in Enrollment Services or the Program Director well ahead of the date they plan to apply for admission to allow time to meet admission requirements. Applications are available online at www.jeffersonstate.edu/rpt.

Students who have completed the requirements and all application procedures will be considered for admission. Students will be ranked according to a point system and all required items must be submitted on or before the application deadline.

This includes:

Jefferson State Admission

1. Applicant must be admitted to Jefferson State, unconditionally, and must be in good standing with the College. It is the responsibility of the applicant to ensure that all required admission documents are submitted and all admission requirements to the College are met.
2. Submit all official college transcripts from each college previously attended to Jefferson State's Admissions/Enrollment Services Office
3. Submit the highest ACT or SAT composite score to Jefferson State's Admissions/Enrollment Services Office
4. If applying for Financial Aid, complete the FAFSA application

Respiratory Therapy Admission Requirements

1. Completion of all general education requirements (ENG 101, SPH Elective, MTH 100 or higher, BIO 201, BIO 202, HUM and Fine Arts Elective, PSY 200) before applying for admission to the program
2. Student must earn a grade of C (70) or better on general education pre-requisite required courses (ENG 101, SPH Elective, MTH 100 or higher, BIO 201, BIO 202, HUM and Fine Arts Elective, PSY 200). Note: BIO 201 and BIO 202 must be within 5 years.
3. Submit copy of ALL unofficial transcripts from ALL colleges attended. Include in application packet.
4. Student must possess a cumulative GPA of 2.50 or greater on a 4.0 scale
5. ACT composite score of 18 or higher (National or Residual) or SAT Score of 940 or higher. Proof of score must be submitted with the application.
6. Not a requirement for admission, however, all students admitted to the program must submit to a drug screening and background check and provide other required documentation (Current CPR

Certification, Health/Hospitalization Insurance, Liability Insurance, Immunizations, etc.). Applicants with a history of criminal arrest or convictions should discuss the matter with the Program Director.

7. Complete the Respiratory Therapy (RPT) Observation Form (Optional).
8. Only those students who have met all the criteria and submitted all required paperwork by the deadline will be considered for the first round of admission. Late applicants may be considered in a second-round admission if space is available.
9. Once admitted, student must attend a **MANDATORY** Orientation.

Transfer Credit of Previous Credit – General Education Courses

Students who have transfer credit should request the evaluation of transcripts from other colleges attended by Enrollment Services

Grading Scale

Letter grades for all RPT course are assigned according the following system: Students must achieve a 75% "C" or higher in all Respiratory Therapy (RPT) courses.

A	Excellent (90-100)
B	Good (80-89)
C	Average (75-79)
D	Poor (60-74)
F	Failure (below 60)
W	Withdrawal
WP	Withdrawal Passing
WF	Withdrawal Failing
I	Incomplete
AU	Audit
RW	Required Withdrawal

Essential Functions

Respiratory therapists are responsible for assessments, treatments, diagnostic testing, and having critical thinking skills, while multi-tasking, for all patients in a healthcare or homecare settings, especially patients with cardiopulmonary diseases. Students in the respiratory therapy program must be able to adequately function and perform procedures, treatments, and testing within the scope of practice. Essential functions includes, but are not limited to the following:

Communication:

- Students must be able communicate appropriately and efficiently with a diversity population (i.e. faculty, hospital staff, patients, and patients' family members.)

- Convey thoughts in verbal and written form
- Use and interpret appropriate non-verbal communication

Mobility:

- Students must have the strength and physical ability to perform adequate patient care.
- Students should be able to maneuver patients, equipment, and other related items without causing personal harm or harm to others

Tactile:

- Student must be able to properly perform patient assessments, operate equipment safely, and perform procedures at a competent level.

Hearing and Vision:

- Student must possess adequate hearing and vision in order to properly assess patients
- Participate in all aspects of patient care as it relates to the respiratory care scope of practice.
- Read numbers, letters, and words in fine print or on electronic devices (i.e. hospital computers/charts, computer standardized tests, paper exams, etc.)
- Hear high and low frequency sounds, such as telephones, monitor alarms, emergency signals.

Behavioral:

- Students must have sufficient mental and emotional health to work effectively in a fast paced, hospital/clinical environment.
- Student will likely be exposed to high-stressful medical situations that require a certain level of mental and emotional stability

Request for reasonable accommodations should be directed to:

Jefferson State Community College
 ADA Office
 Room 305, Fitzgerald Student Center
 2601 Carson Road, Birmingham, AL 35215
 205-856-6077

Technical Standards

In order to perform the tasks required of a respiratory therapist), certain physical, reasoning and communication capabilities are required. Students must demonstrate the ability to perform required functions as a routine part of either classroom, laboratory or clinical education. Students should be aware that successful completion of the Respiratory Therapy Program will depend upon the ability to meet the following technical standards.

Examples of technical skills include:

A reasonable amount of strength and mobility are required in order to effectively work in a clinical setting for eight (8) to twelve (12) hours per day:

1. Lift, move or push heavy equipment, specifically ventilators, therapy equipment, stretchers and/or wheelchairs with patients in them
2. Assist in lifting or repositioning patients who may be paralyzed, comatose or otherwise incapacitated, from patient beds and stretchers or wheelchairs
3. Provide physical assistance and care for patients in a timely manner in all circumstances
4. Reach overhead in order to manipulate ventilator arms, monitoring equipment, etc.

Manual dexterity, good motor skills and eye-hand coordination are necessary in order to:

1. Assemble, operate, and manipulate equipment
2. Don and doff sterile gloves and other personal protective equipment (PPE)
3. Manipulate a syringe and needle to prepare medications.
4. Set up equipment
5. Perform routine and complex therapies, i.e. SVN, suctioning, manual ventilation
6. Palpate pulses (arteries) for puncture.
7. Perform airway management
8. Perform chest compressions during CPR and manually ventilate a patient.

Sensory function in upper limbs is necessary in order to palpate blood vessels for blood sampling.

The ability to hear faint or muffled sounds is necessary in order to:

1. Assess breath sounds
2. Respond to patient needs since ventilator alarms may be muffled due to ICU noise
3. Monitor equipment operation or dysfunction which may be indicated by low intensity sounds.
4. Function when the use of surgical masks are required for protection of the patient or hospital personnel
5. Respond to pages and emergency calls from the hospital public address system

Visual acuity (the ability to see fine lines) to:

1. Read patient monitor values and ventilator values in dimly lit surroundings
2. Read waveform graphic monitors

The ability to communicate orally and in writing in the English language is a requirement for RTs in order to:

1. Ascertain and record patient histories
2. Monitor and document patient progress
3. Provide clear and audible directions when speaking directly to others.
4. Provide accurate information when discussing patient management with physicians and other support staff
5. Process and communicate information on the patient's status with accuracy in a timely manner for appropriate interaction with physician, supervisors, and other members of the health care team.

Cognitive and intellectual abilities to:

1. Measure, calculate, and analyze data
2. Make proper assessments
3. Use sound judgement
4. Appropriately prioritize therapeutic interventions
5. Measure and record patient care outcomes.

Possess acceptable mental/attitudinal standards in order to:

1. Function safely, effectively and calmly under stressful situations
2. Maintain composure while managing multiple tasks simultaneously
3. Prioritize multiple tasks
4. Exhibit social skills necessary to interact effectively with patients, families, supervisors and coworkers of the same or different cultures such as respect, politeness, tact, collaboration, teamwork, discretion
5. Display attitudes/actions consistent with the ethical standards of the profession

Associate in Applied Science Degree Requirements

Courses required for:

Respiratory Therapy (AAS C250)

General Courses		(23 Hours)
Course	Title	Sem Hrs
ENG 101	English Composition I	3
SPH 106 or 107	Fundamentals of Oral Communications or Fundamentals of Public Speaking	3
MTH 100	Intermediate College Algebra or higher	3
BIO 201*	Anatomy and Physiology, I	4
BIO 202*	Anatomy and Physiology II	4
Humanities and Fine Arts	Art, humanities, religion, theatre, music, philosophy, foreign language, literature	3
Elective (AHUM)		
PSY 200	General Psychology	3

Total General Courses 23

*** Must be completed within 5 years for admission purposes**

Program Courses (53 hours)

First Semester

Course	Title	Sem Hrs
RPT 210	Clinical Practice I	2
RPT 211	Introduction to Respiratory Care	2
RPT 212	Fundamentals of Respiratory Care I (Lab 2:1)	4
RPT 213	Anatomy & Physiology for the RCP	3
RPT 214	Pharmacology for the RCP	2
Total First Semester		13

Second Semester

Course	Title	Sem Hrs
RPT 220	Clinical Practice II	2
RPT 221	Pathology for the RCP I	3
RPT 222	Fundamentals of Respiratory Care II	4
RPT 223	Acid Base Regulation and Arterial Blood Gas Analysis	2
RPT 254	Patient Assessment Techniques	2
Total Second Semester		13

Third Semester

Course	Title	Sem Hrs
RPT 230	Clinical Practice III	2
RPT 231	Pathology for the RCP II	3
RPT 234	Mechanical Ventilation for the RCP	4
RPT 242	Perinatal/Pediatric Respiratory Care	3
RPT 244	Critical Care Considerations for RCP	2
Total Third Semester		14

Fourth Semester

Course	Title	Sem Hrs
RPT 232	Diagnostic Procedures for the RCP	2
RPT 233	Special Procedure for the RCP	2
RPT 240	Clinical Practice IV	4
RPT 241	Pulmonary Rehabilitation & Home Care	2
RPT 243	Computer Applications for the RCP	2
RPT 266	Seminar in Respiratory Medicine I RPT	1
Total Fourth Semester		13

Total Program Courses	53
Total General Courses	23
Total	76

08/27/18 - Addendum to the 2018-2019 College Catalog and Handbook in the Course Descriptions Section.

Respiratory Therapy (RPT)

RPT 210 Clinical Practice I. 2 institutional hours.

PREREQUISITE: As required by program.

This clinical course provides for initial hospital orientation and development of general patient assessment and communication skills required for safe and effective patient care. Emphasis is placed upon application of classroom and laboratory experiences within the clinical environment. Upon completion, students should demonstrate adequate psychomotor skills and cognitive abilities necessary for initial patient contact and safe and effective performance of basic respiratory care procedures. **CORE**

RPT 211 Introduction to Respiratory Care. 2 institutional hours.

PREREQUISITE: As required by program.

This course is designed to acquaint the student with responsibilities of the Respiratory Care Practitioner (RCP) as a member of the health care team. Areas of emphasis include: history of the profession, credentialing mechanism, licensure, medical ethics, communication skills, basic medical terminology, and patient assessment. Upon completion, students should be able to demonstrate effective communication skills, proper use of aseptic technique, deference to appropriate professional ethics and behavior, and be able to perform basic patient assessment. **CORE**

RPT 212 Fundamentals of Respiratory Care I. 4 institutional hours.

PREREQUISITE: As required by program.

A fundamental course which presents the scientific basis for respiratory care procedures and application of basic chemistry and physics as related to compressed gases and respiratory care equipment operation. Experimental laboratory is required and emphasis includes: design, functional characteristics, and operation of commonly encountered respiratory care equipment, use of medical gases and applied chemistry, physics, and mathematics. Upon completion, the student should be able to demonstrate an adequate knowledge base concerning function and troubleshooting of respiratory care equipment and concepts of applied physics, chemistry, and mathematics. **CORE**

RPT 213 Anatomy and Physiology for the RCP. 3 institutional hours.

PREREQUISITE: As required by program.

This course provides detailed lecture and audio-visual presentations which concentrate on the cardiopulmonary and

renal systems. Emphasis is placed on structure, function, and physiology of the cardiopulmonary and renal systems and the role each plays in the maintenance of homeostasis. Upon completion, the student should be able to demonstrate adequate knowledge of the structure, function, and physiology of the cardiopulmonary and renal systems. **CORE**

RPT 214 Pharmacology for the RCP. 2 institutional hours.

PREREQUISITE: As required by program.

This course is a detailed study of drugs encountered in respiratory care practice and the function of the autonomic nervous system. Areas of emphasis include: determination of drug dosage, applied mathematics, clinical pharmacology, indications, hazards, intended actions, and side-effects of agents used in respiratory care. Upon completion, the student should be able to complete a dosage calculation test with 90% proficiency and demonstrate an adequate understanding of the clinical pharmacology of respiratory care drugs, and the general principles of pharmacology. **CORE**

RPT 220 Clinical Practice II. 2 institutional hours.

PREREQUISITE: As required by program.

This course is a detailed study of drugs encountered in respiratory care practice and the function of the autonomic nervous system. Areas of emphasis include: determination of drug dosage, applied mathematics, clinical pharmacology, indications, hazards, intended actions, and side-effects of agents used in respiratory care. Upon completion, the student should be able to complete a dosage calculation test with 90% proficiency and demonstrate an adequate understanding of the clinical pharmacology of respiratory care drugs, and the general principles of pharmacology. **CORE**

RPT 221 Pathology for the RCP I. 3 institutional hours.

PREREQUISITE: As required by program.

This course is a survey of commonly encountered diseases and disorders which may affect the function of the cardiopulmonary system, and the clinical manifestations and treatment rationales as related to respiratory care practice. Practical laboratory is required and course emphasis is placed upon the application of sound diagnostic techniques in the gathering of data in support of diagnosis of specific disease entities as well as progression of pathological changes in cardiopulmonary function. Upon completion, the student should be able to demonstrate the ability to gather appropriate information from various sources in support of diagnosis of specific cardiopulmonary disease as well as an adequate understanding of cardiopulmonary pathology. **CORE**

RPT 222 Fundamentals of Respiratory Care II. 4 institutional hours.

PREREQUISITE: RPT 212

This course continues to present the fundamental scientific basis for selected respiratory care procedures. Experimental laboratory is required and areas of emphasis include:

therapeutic techniques utilized in bronchial hygiene, hyperinflation therapy, mechanical ventilation of the adult, manual resuscitation equipment, the equipment utilized in bedside assessment, and mechanical ventilation. Upon completion, the student should be able to demonstrate the cognitive abilities and psychomotor skills required to perform the procedures presented. **CORE**

RPT 223 Acid Base Regulation and ABG Analysis. 2 institutional hours

PREREQUISITE: As required by program.

This course continues to present the fundamental scientific basis for selected respiratory care procedures. Experimental laboratory is required and areas of emphasis include: therapeutic techniques utilized in bronchial hygiene, hyperinflation therapy, mechanical ventilation of the adult, manual resuscitation equipment, the equipment utilized in bedside assessment, and mechanical ventilation. Upon completion, the student should be able to demonstrate the cognitive abilities and psychomotor skills required to perform the procedures presented. **CORE**

RPT 230 Clinical Practice III. 2 institutional hours.

PREREQUISITE: RPT 220

This is the third course in the clinical sequence, and is designed to allow the student to function in the role of primary care giver. Emphasis is placed upon mastery of basic respiratory care procedures, administration of aerosol drugs, and care of the patient receiving mechanical ventilation. Upon completion, the student should be able to demonstrate psychomotor skills and cognitive abilities necessary to function safely and effectively in the role of primary care giver. **CORE**

RPT 231 Pathology for the RCP III. 3 institutional hours

PREREQUISITE: RPT 221

This course continues to present specific disease entities which may impair cardiopulmonary function. Laboratory study is directed toward diagnostic techniques and decision making. Course emphasis is placed upon etiology, diagnosis, prognosis, and treatment rationale for each medical problem presented. Upon completion, the student should be able to demonstrate the cognitive abilities necessary to integrate clinical and laboratory data obtained from various sources in support of the diagnosis and treatment of the specific disease entities presented.

RPT 232 Diagnostic Procedures for the RCP. 2 institutional hours

PREREQUISITE: As required by program

This course is designed to present the value of various procedures as an aid to diagnosis in cardiopulmonary disease. Course emphasis is placed upon procedures such as complete pulmonary function testing, bronchoscopy, cardiac diagnostic procedures, and ventilation/perfusion studies. Upon completion, the student should be able to demonstrate the

psychomotor and cognitive abilities necessary to perform routine diagnostic procedures. **CORE**

RPT 233 Special Procedures for the RCP. 2 institutional hours

PREREQUISITE: As required by program

This course identifies and presents special procedures and medical specialties for various tasks required of the RCP, while functioning in an assistive role to the physician. Course emphasis is placed upon phlebotomy, bronchoscopy, hemodynamic assessment, and advanced cardiopulmonary monitoring techniques. Upon completion, the student should be able to demonstrate cognitive abilities and understand the psychomotor skills necessary to perform assistive functions during the various procedures presented. **CORE**

RPT 234 Mechanical Ventilation for the RCP. 4 institutional hours

PREREQUISITE: As required by program

This course continues and expands the presentation of material concerning mechanical ventilation as previously introduced including indications, modification, and discontinuance of mechanical ventilation. Laboratory is required and course emphasis is placed upon the application of scientific principles to the clinical use of various modes of mechanical ventilation. Upon completion, the student should be able to demonstrate the cognitive and psychomotor skills required to effectively institute and maintain various methods of mechanical ventilation. **CORE**

RPT 240 Clinical Practice IV. 4 institutional hours

PREREQUISITE: RPT 230

This course, the last in the required clinical sequence, provides opportunities for the student to further refine clinical skills. Course emphasis is placed upon critical care, neonatal mechanical ventilation, home care and discharge planning. Upon completion, the student should be able to demonstrate the cognitive and psychomotor skills required to function in the role of advanced respiratory care practitioner. **CORE**

RPT 241 Rehabilitation and Home Care for the RCP. 2 institutional hours

PREREQUISITE: As required by program.

This course presents special considerations which apply to rehabilitation and home care of the patient with cardiopulmonary disorders. Emphasis is placed upon the role of the RCP within the home care medical community and modification of techniques and procedures necessary for effective pulmonary management. Upon completion, the student should be able to demonstrate an understanding of discharge planning and disease management protocols as applied to rehabilitation and the continuation of effective respiratory care outside of an acute care facility. **CORE**

RPT 242 Perinatal/Pediatric Respiratory Care. 3 institutional hours

PREREQUISITE: As required by program.

This course presents the unique requirement for appropriate delivery of respiratory care to the neonatal and pediatric patient. Laboratory is required and course emphasis is placed upon a detailed outline of fetal lung development, fetal circulation, neonatal cardiopulmonary disorders, and specialized equipment and techniques, as well as general considerations of provision of care to neonatal and pediatric patients. Upon completion, the student should be able to demonstrate the cognitive and psychomotor skills required for safe and effective delivery of respiratory care to the neonatal and pediatric patient. **CORE**

RPT 243 Computer Applications for the RCP. 2 institutional hours

PREREQUISITE: As required by program.

This course is designed to allow the student practice in utilizing computer assisted clinical simulation software as well as allow for a general program review in preparation for credentialing examinations. Emphasis is placed on development of critical thinking skills, specific to the discipline, and development of computer literacy. Upon completion, students should be able to demonstrate computer literacy and satisfactory performance on nationally standardized comprehensive self-assessment examinations. **CORE**

RPT 244 Critical Care Considerations for the RCP. 2 institutional hours

PREREQUISITE: As required by program.

This course provides for continued discussion concerning the monitoring and maintenance of patients who are treated in the critical care area of an acute care hospital. Course emphasis is placed upon advanced monitoring and assessment techniques employed in the treatment of the critical care patient. Upon completion, the student should be able to demonstrate increased psychomotor and cognitive abilities as pertaining to critical care. **CORE**

RPT 254 Patient Assessment Techniques for the RCP. 2 institutional hours

PREREQUISITE: As required by program.

This course is designed for the respiratory therapy student or respiratory care practitioner who desires to augment previous instruction in patient assessment techniques and further refine clinical assessment abilities. Emphasis is placed on physician interaction and development of discrete clinical assessment skills. Upon completion, of this course the student/practitioner should be able to demonstrate improved assessment skills pertaining to evaluation of patients with cardiopulmonary disorders.

RPT 266 Seminar in Respiratory Therapy Medicine I. 1 institutional hour

PREREQUISITE: As required by program.

This course is a series of physician and/or guest lecturers

designed to present topics of special interest to the student or practitioner. Emphasis is placed upon current medical practice within the field of pulmonary medicine and cardiology. Upon completion, the student should be able to demonstrate an increased knowledge base concerning the topics of special interest presented.