

# BHS in Clinical and Diagnostic Sciences with Emphasis in Respiratory Therapy

## Degree Program Description

Respiratory therapists assess and treat dysfunction involving the heart and lungs. Respiratory therapists work in hospitals, intensive care units, emergency rooms, air and ambulance transport, neonatal and pediatric units, patient homes, sleep laboratories, skilled nursing facilities, and in the medical device industry. They work closely with physicians to manage ventilators and artificial airways, administer prescribed inhaled medications, perform pulmonary function testing, and analyze arterial blood specimens.

## Entry into Practice RRT

The Respiratory Therapy program at MU includes two years of pre-requisite coursework and two years (including one summer semester) of professional coursework. Students graduate with the Bachelor of Health Science (BHS) degree in Clinical and Diagnostic Sciences with an emphasis in Respiratory Therapy. Graduates of the program are eligible to take credentialing examinations administered by the National Board for Respiratory Care (NBRC <https://www.nbrc.org/>).

## Entry to BHS in CDS with an Emphasis in RT Program Goals

The goal of the Entry to BHS Respiratory Therapy Program is 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 therapists (RRTs) and to prepare leaders for the field of respiratory care by including curricular content with objectives related to the acquisition of skills in one or more of the following: management, education, research, and advanced clinical practice (which may include an area of clinical specialization).

## Entry to BHS in CDS with an Emphasis in RT Expected Student Learning Outcomes

1. Demonstrate the ability to evaluate, comprehend, and apply clinical information in order to match patient needs with therapeutic interventions.
2. Exhibit technical proficiency in all of the skills necessary to fulfill the role as an advanced level respiratory therapist.
3. Display professional behavior consistent with employer expectations for a registered respiratory therapist.

## RRT Degree Advancement

A fully online degree advancement program is available for credentialed registered respiratory therapists (RRT) who seek a bachelor's degree. This program includes professional courses to enhance student knowledge in the areas of management, education, research and adult, neonatal/pediatric critical care. Students may transfer general education and respiratory therapy coursework from a regionally accredited

institution/program prior to completing the core requirements of the program.

## RRT Degree Advancement Program Goals

This program provides graduates of entry into respiratory care professional practice degree programs with additional knowledge, skills, and attributes in leadership, management, education, research, or advanced clinical practice both to meet their current professional goals and to prepare them for practice as advanced degree respiratory therapists.

## RRT Degree Advancement Expected Student Learning Outcomes

1. Utilize management and leadership principles to solve problems and improve performance.
2. Demonstrate strategies and techniques to enhance patient education and rehabilitation.
3. Employ research methodology to analyze relevant medical literature.
4. Integrate pertinent clinical data into recommendations for appropriate critical care interventions.
5. Apply ethical theories and principles to make recommendations for patient care.
6. Integrate multiple perspectives to provide a comprehensive analysis of current issues in health care.

## Major Program Requirements

There are two options for completing the degree based on a student's entry level into the program and previous experiences. The Entry into Practice program is for students who are interested in becoming a respiratory therapist. The RRT Degree Advancement option is for students who are credentialed as registered respiratory therapists. The Degree Advancement option takes a student's previous general education and respiratory therapy coursework into account, and subsequent required coursework to complete the program will be adjusted accordingly. There is no clinical component for the Degree Advancement option.

In addition to pre-requisite and Core requirements below, students must meet degree and University requirements (<https://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), including University general education (<https://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>) requirements. A separate application is required for admission to the program. Students are encouraged to work with an advisor in order to best structure the pre-requisites and prepare for the program application. Students must complete the courses below or an approved equivalent with a grade of C or higher to earn the BHS in Clinical and Diagnostic Sciences with an emphasis in Respiratory Therapy degree.

Pre-Respiratory Therapy Requirements		45
MATH 1100	College Algebra	3
or MATH 1050	Quantitative Reasoning	
ENGLISH 1000	Writing and Rhetoric	3
COMMUN 1200	Public Speaking	3
1000-level or higher Psychology course		3
BIO_SC 1010 & BIO_SC 1020	General Principles and Concepts of Biology and General Biology Laboratory	5

or BIO_SC 1030	General Principles and Concepts of Biology with Laboratory	
or BIO_SC 1500	Introduction to Biological Systems with Laboratory	
CDS 2190	Medical Terminology *	3
CHEM 1400 & CHEM 1401	College Chemistry I and College Chemistry I Laboratory	4
or CHEM 1100	Atoms and Molecules with Lab	
PTH_AS 2201 & PTH_AS 2203	Human Anatomy Lecture and Human Anatomy Laboratory	5
MICROB 2800	Microbiology for Nursing and Health Professions	4-5
or MICROB 3200	Medical Microbiology and Immunology	
or BIO_SC 3750 & BIO_SC 3760	General Microbiology and Microbiology Laboratory	
MPP 3202	Elements of Physiology	5
or BIO_SC 3700	Human Physiology	
STAT 1200	Introductory Statistical Reasoning	3
or STAT 1300	Elementary Statistics	
or STAT 2500	Introduction to Probability and Statistics I	
or ESC_PS 4170	Introduction to Applied Statistics	
CDS 3100	Introduction to Research	3
or HLTH_SCI 4200W	Introduction to The Research Process and Evidence Base - Writing Intensive	
RS_THR 1000	Introduction to Respiratory Therapy * (Optional)	1
<b>Major Core Requirements - Entry into Practice</b>		<b>70</b>
CDS 3460	Cardiovascular and Pulmonary Diagnostic Applications I	3
CDS 4440	Organization and Administration	2
CDS 4460	Cardiovascular and Pulmonary Diagnostic Applications II	3
CDS 4500	Emergency and Disaster Management in Healthcare	1
RS_THR 3220	Equipment and Therapeutics	3
RS_THR 3240	Assessment and Therapeutics Lab	3
RS_THR 3290	Cardiopulmonary Pharmacology	3
RS_THR 3420W	Principles of Mechanical Ventilation - Writing Intensive	3
RS_THR 3440	Mechanical Ventilation Lab	3
RS_THR 3941	Clinical Practice I	2
RS_THR 3942	Clinical Practice II	4
RS_THR 3943	Clinical Practice III	2
RS_THR 4020	Perinatal/Neonatal Respiratory Care	3
RS_THR 4040	Respiratory Pathophysiology	5
RS_THR 4240	Pulmonary Rehabilitation	3
RS_THR 4420	Pediatric Respiratory Care	3
RS_THR 4620	Pulmonary Function Technologies	3
RS_THR 4930	Current Issues in Respiratory Care (Capstone)	3
RS_THR 4940	Clinical Practice IV	5
RS_THR 4973	Clinical Practice V	4
RS_THR 4983	Clinical Practice VI	4
RS_THR 4993	Clinical Practice VII	5
<b>Major Core Requirements - RRT Degree Advancement</b>		<b>25</b>
CDS 4500	Emergency and Disaster Management in Healthcare	1
HLTH_SCI 4480	Clinical Ethics	3

or CDS 4480	Clinical Ethics	
or PHIL 2440	Medical Ethics	
RS_THR 4240	Pulmonary Rehabilitation	3
RS_THR 4420	Pediatric Respiratory Care	3
RS_THR 4440	Organization and Administration	3
or CDS 4985	Healthcare Organization and Leadership	
RS_THR 4660	Advanced Mechanical Ventilation Theory	3
RS_THR 4820	Adult Critical Care	3
or RS_THR 4860	Neonatal and Pediatric Critical Care	
RS_THR 4930	Current Issues in Respiratory Care (Capstone)	3
CDS 3100W	Introduction to Research - Writing Intensive (Program WI for Degree Advancement students)	3
or HLTH_SCI 4200W	Introduction to The Research Process and Evidence Base - Writing Intensive	

\* Not required for degree advancement students.

## Professional Credentialing/Licensure

After graduation, entry to practice students are eligible to take the credentialing exams offered by the National Board for Respiratory Care (NBRC) (<https://www.nbrc.org/>). The RRT credential is required to begin RRT Degree Advancement core courses.

Graduates will also be required to apply for licensing in the state in which they choose to work.

## Accreditation

The University of Missouri Respiratory Therapy Program's Bachelor of Health Science in Clinical & Diagnostic Sciences with an emphasis in Respiratory Therapy, CoARC #200033, in Columbia, MO is accredited by the Commission on Accreditation for Respiratory Care (<https://coarc.com/>).

The University of Missouri Respiratory Therapy Program's Bachelor of Health Science in Clinical & Diagnostic Sciences RRT Degree Advancement Program, CoARC #510020, holds Provisional Accreditation from the **Commission on Accreditation for Respiratory Care (CoARC)**. 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 and any other documentation required by the CoARC, as well as satisfactory completion of an initial on-site visit.

Programmatic outcomes data for entry into practice programs are available to the public on the CoARC website.

Commission on Accreditation for Respiratory Care

264 Precision Blvd  
Telford, TN 37690  
817-283-2835  
<https://coarc.com/>

## Semester Plan for Entry to Practice

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available. An individualized semester plan will be created for RRT Degree Advancement students by the program director or CHS Student Services.

First Year			
Fall	CR	Spring	CR
BIO_SC 1010 & BIO_SC 1020	5	ENGLISH 1000	3
MATH 1100 or 1050	3	CHEM 1100	4
PSYCH 1000 <sup>any level</sup> psych will be accepted	3	COMMUN 1200	3
Humanities	3	STAT 1200 or ESC_PS 4170	3
<b>14</b>		<b>13</b>	

Second Year			
Fall	CR	Spring	CR
CDS 3100	3	MPP 3202	5
HIST 1100, 1200, or POL_SC 1100	3	MICROB 2800 or 3200	4
PTH_AS 2201 & PTH_AS 2203	5	Writing Intensive 2000+ level Humanities	3
RS_THR 1000 (recommended)	1	CDS 2190	3
SOCIOL 1000 (or other Beh/Social Science)	3		
<b>15</b>		<b>15</b>	

Third Year					
Fall	CR	Spring	CR	Summer	CR
RS_THR 3220	3	CDS 3460	3	CDS 4460	3
RS_THR 3240	3	RS_THR 3420W	3	RS_THR 3943	2
RS_THR 3290	3	RS_THR 3440	3	RS_THR 4240	3
RS_THR 3941	2	RS_THR 3942	4		
RS_THR 4040	5	RS_THR 4020	3		
<b>16</b>		<b>16</b>		<b>8</b>	

Fourth Year			
Fall	CR	Spring	CR
CDS 4440	2	RS_THR 4930	3
CDS 4500	1	RS_THR 4973	4
RS_THR 4420	3	RS_THR 4983	4
RS_THR 4620	3	RS_THR 4993	5
RS_THR 4940	5		
<b>14</b>		<b>16</b>	

**Total Credits: 127**