

# Respiratory Therapist

Program Number: 10-515-1

Associate in Applied Science Degree

Health-Related Professions Program Cluster

School of Health Education

Program offered at Madison Campuses

For information call: (608) 246-6065, (608) 246-6697 or  
(800) 322-6282 Ext. 6065 or 6697

## About the Program

Respiratory therapists are members of a team of health care professionals working in a wide variety of clinical settings. They evaluate, treat and manage patients of all ages with respiratory and cardiopulmonary disease. Working with physicians, respiratory therapists are involved in clinical decision-making and patient education. Respiratory therapists work primarily in hospital settings providing and assessing the clinical status of patients and performing diagnostic testing. Therapists work in emergency rooms and intensive care units, participating in life support activities, such as airway care, mechanical ventilation and resuscitation efforts. Respiratory therapists may also work in diagnostic labs, such as a pulmonary function or sleep labs. They also work in home care and clinic settings.

This program is accredited by the [Commission on Accreditation for Respiratory Care](http://www.coarc.com) (CoARC) <http://www.coarc.com>; 1248 Harwood Road; Bedford, Texas 76021-4244; (817) 283-2835

As an advanced-level respiratory therapist program, graduates are eligible to become Registered Respiratory Therapists. (RRT)

Insert Note: Convictions of crimes or pending charges may be grounds for denial of license if the circumstances of the conviction or charge are substantially related to professional practice. Applicants should check the following website for more information:

[www.dhfs.state.wi.us/caregiver](http://www.dhfs.state.wi.us/caregiver) or call (608) 266-5764 or contact Department of Regulation and Licensing of the State of Wisconsin.

## Unique Requirements for Admission

- 1) High school graduation or GED/HSED or higher documented degree;
- 2) Two semester of high school level or one semester of college-level Chemistry courses with grades of C or better;
- 3) Algebra competency demonstrated **within the last two years** through either satisfactory competency test scores **OR** one semester of college-level Algebra with a satisfactory grade of C or better (i.e., Elementary Algebra 10-834-110 or College Math 10-804-107; and
- 4) ACT, SAT, COMPASS, ASSET or equivalent assessment test

## Program Requirements

- 1) Caregiver Background Check (CBC); refer to catalog for this Health, Human and Protective Services Policy;
- 2) Evidence of current CPR "Professional Level" certification before beginning the first core course. Students must maintain current CPR certification while attending the program;
- 3) Physical exam and completed Health History Form on file prior to October 1<sup>st</sup> of each calendar year; and
- 4) Essential functions for the Respiratory Care Practitioner Program.

## Curriculum

The courses listed below outline the requirements for graduation for students entering this program in the 2012-2013 academic year. Requirements for graduation may vary depending on the semester in which a student is admitted to their program. Current/continuing students should consult their degree progress report available through their student center account for specific graduation requirements. Program requirements are subject to change.

### FIRST YEAR

First Semester	Credits	Hrs/week Lec-Lab
10-515-111 Respiratory Survey .....	3	3-0
10-801-195 Written Communications * OR .....	3	3-0
10-801-201 English 1* .....	(3)	(3-0)
10-501-101 Medical Terminology * .....	3	3-0
20-806-206 General Anatomy and Physiology* # .....	4	3-2
10-806-134 General Chemistry * OR .....	4	4-0
20-806-201 <u>General Org. &amp; Bio Chemistry</u> .....	(5)	(4-2)
<b>Semester Total</b>	<b>17</b>	

### Second Semester

20-806-273 Microbiology* OR .....	4	2-2
20-806-274 Microbiology* .....	(5)	(3-2)
10-515-171 Respiratory Therapeutics 1 (9 wk) .....	3	4-4
10-515-172 Respiratory Therapeutics 2 (9 wk) .....	3	4-4
10-515-173 Respiratory Pharmacology .....	3	3-0
10-515-174 <u>Respiratory/Cardiac Physiology</u> .....	3	3-0
<b>Semester Total</b>	<b>16</b>	

### Interim

10-515-175 <u>Respiratory Clinical 1</u> .....	2	0-36
<b>Semester Total</b>	<b>2</b>	

### Summer

10-801-198 Speech* OR .....	3	3-0
20-810-201 Fundamentals of Speech* OR .....	(3)	(3-0)
20-810-205 Interpersonal & Small Group Comm* OR .....	(3)	(3-0)
10-801-196 Oral/Interpersonal Communication* OR .....	(3)	(3-0)
20-801-202 <u>English Composition 2*</u> .....	(3)	(3-0)
<b>Semester Total</b>	<b>3</b>	

### SECOND YEAR

#### First Semester

10-515-176 Respiratory Disease .....	3	3-0
10-515-112 Respiratory Airway Management .....	2	1-2
10-515-113 Respiratory Life Support .....	3	2-2
10-515-178 Respiratory Clinical 2 (9 wk) .....	3	0-18
10-515-179 Respiratory Clinical 3 (9 wk) .....	3	0-18
10-809-197 Contemporary American Society* OR .....	3	3-0
20-809-203 <u>Introduction to Sociology*</u> .....	(3)	(3-0)
<b>Semester Total</b>	<b>17</b>	

#### Second Semester

10-515-180 Respiratory Neo/Peds Care .....	2	2-0
10-515-181 Respiratory/Cardio Diagnostics .....	3	2-1
10-515-182 Respiratory Clinical 4/ACLS (9 wk) .....	3	0-18
10-515-183 Respiratory Clinical 5 (9 wk) .....	3	0-18
10-515-184 Neonatal Pediatric Resuscitation (NRP) .....	1	1-0
10-809-199 Psychology of Human Relations* OR .....	3	3-0
20-809-231 <u>Introduction to Psychology*</u> .....	(3)	(3-0)
<b>Semester Total</b>	<b>15</b>	

\* Courses which may be taken prior to entering the program and may be taken at the college transfer level or Associate Degree level.

# If 20-806-207 Anatomy and Physiology 1 & 20-806-208, Anatomy and Physiology 2 are both taken, it will take the place of General Anatomy & Physiology.

**Note:** A copy of the [essential functions](#) necessary to successfully complete the program of study is available on the web site.



## Program Courses

**10-515-111 Respiratory Therapy Survey 3 credits**

Examines the role of the Respiratory Therapist within the healthcare community. Reviews the ethical, legal, and regulatory principles that guide practice across diverse populations. Introductory patient assessment and critical thinking processes used in the development of respiratory care plans are explored. Prerequisites: Acceptance into the Respiratory Therapist program. Corequisites: 20-806-206 and 10-806-134.

**10-515-112 Respiratory Airway Management 2 credits**

Focuses on adult respiratory critical care including management of artificial airways. Prerequisite: 10-515-175. Corequisites: 10-515-113, 10-515-176, 10-515-178 & 10-515-179

**10-515-113 Respiratory Life Support 3 credits**

Focuses on adult respiratory critical care including management of mechanical ventilation. Prerequisite: 10-515-175; Corequisites: 10-515-112, 10-515-178, and 10-515-179.

**10-515-171 Respiratory Therapeutics 1 3 credits**

Introduces the topics of medical gas administration and humidity and aerosol therapy. The learner will apply physics, math and patient assessment concepts to oxygen, aerosol and humidity therapy. Prerequisite: 10-515-170. Corequisites: 10-515-172, 10-515-173 and 10-515-174.

**10-515-172 Respiratory Therapeutics 2 3 credits**

Introduces therapeutic procedures including arterial puncture, bronchial hygiene, lung expansion therapy, and pulmonary rehabilitation. Corequisites: 10-515-171, 10-515-173 and 10-515-174.

**10-515-173 Respiratory Pharmacology 3 credits**

Examines basic pharmacology principles, drug dosage, and calculations. Medications for inhalation including mucolytics, bronchodilators, and anti-inflammatories. Also includes cardiac drugs, anesthetic drugs, neuromuscular blockers, and antimicrobials. Corequisites: 10-515-171, 10-515-172 and 10-515-174.

**10-515-174 Respiratory/Cardiac Physiology 3 credits**

Provides the student with an in-depth knowledge of the structure and function of the respiratory and circulatory systems necessary to function as a competent Respiratory Therapist. Corequisites: 10-515-171, 10-515-172 and 10-515-173.

**10-515-175 Respiratory Clinical 1 2 credits**

Introduces respiratory Therapy practice in the hospital setting. Includes the development of skills such as basic therapeutics, patient assessment, medical record review, safety practices, patient interaction, and communication. Prerequisite: 10-515-173.

**10-515-176 Respiratory Disease 3 credits**

Exploration of signs, symptoms, causes, progression, and treatment of obstructive, restrictive and infectious diseases or disorders of the body that affect the respiratory system. Prerequisite: 10-515-175. Corequisites: 10-515-113, 10-515-178 and 10-515-179.

**10-515-178 Respiratory Clinical 2 3 credits**

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. This course includes the complete program competency list. At the completion of Clinical 2, learners must demonstrate competence in a minimum of 12 (required and/or simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. Prerequisite: 10-515-175. Corequisites: 10-515-176, 10-515-113 and 10-515-179.

**10-515-179 Respiratory Clinical 3 3 credits**

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. This course includes the complete program competency list. At the completion of Clinical 3, learners must demonstrate competence in a minimum of 19 (required and/or simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. Prerequisite: 10-515-175. Corequisites: 10-515-176, 10-515-113 and 10-515-178.

**10-515-180 Respiratory Neo/Peds Care 2 credits**

Provides a comprehensive orientation to the field of neonatal and pediatric respiratory care to include fetal development, birth, neonatal physiology, pulmonary dynamics, abnormal cardiopulmonary conditions, diseases, noninvasive and invasive therapeutic interventions. Prerequisite: 10-515-176. Corequisites: 10-515-181, 10-515-182 and 10-515-183.

**10-515-181 Respiratory/Cardio Diagnostics 3 credits**

Advanced invasive and noninvasive diagnostic cardiopulmonary procedures including pulmonary function, hemodynamics and rescue medicine. Prerequisite: 10-515-176. Corequisites: 10-515-180, 10-515-182 and 10-515-183.

**10-515-182 Respiratory Clinical 4/ACLS 3 credits**

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modification in patient care. This course includes the complete program competency list. At the completion of Clinical 4, learners must demonstrate competence in a minimum of 26 (required and/or simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. Prerequisite: 10-515-176. Corequisites: 10-515-180, 10-515-181 and 10-515-183.

**10-515-183 Respiratory Clinical 5 3 credits**

Focuses on the completion of respiratory therapy competencies and transition to employment. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in all of the required and/or simulated competencies. The instructor may identify specific competencies to be addressed during this clinical. Prerequisite: 10-515-176. Corequisites: 10-515-180, 10-515-181 and 10-515-182.

**10-515-184 Neonatal Pediatric Resuscitation (NRP) 1 credit**

Provides the student with the practice, theory and skills needed to provide advanced ventilator and resuscitation to infants and children. Prerequisites: 10-515-113, 10-515-176; Corequisites: 10-515-180, 10-515-181, 10-515-182 and 10-515-183.

## Career Potential:

- **Respiratory Care Practitioner**

With additional education and/or work experience, graduates may find employment as:

- **Pulmonary Function Technologist**
- **Respiratory Care Manager**
- **Respiratory Care Supervisor**
- **Neonatal/Pediatric Therapist**
- **Respiratory Care Educator**
- **Pulmonary Rehabilitation Therapist**
- **Sleep Disorder Therapist**
- **Home Care Therapist**
- **Pulmonary Research Assistant**

*More detailed and updated information on this program may be available at: [madisoncollege.org](http://madisoncollege.org). The college reserves the right to make changes in the regulations and courses announced in this publication without notice.*

*Madison Area Technical College provides equal opportunity in education and employment.*

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