

# Respiratory Therapy



Health Sciences

Career Pathways

Respiratory therapy, or respiratory care, is an allied health profession specializing in cardiopulmonary disorders and diseases. A respiratory therapist can be instrumental in assisting a physician in the diagnosis, treatment and prevention of a wide spectrum of disorders affecting the heart and lungs.

There are two levels of therapists in respiratory care: certified respiratory therapists and registered respiratory therapists. A certified respiratory therapist is the entry-level position in the field and requires a minimum of an associate degree to be a candidate for the CRT board exam. CRTs typically work with less critically ill patients. A registered respiratory therapist is an advanced-level position in the field and requires a two-, three- or four-year degree program. RRTs typically work in ICUs and are more likely to be in positions of supervision. Monroe County Community College has both CRT and RRT programs at the associate-degree level. Graduates of the CRT program may transfer to a bachelor degree program or elect to continue with the accelerated RRT program for the advanced practitioner. Because area employers prefer the RRT, graduates who complete the accelerated registered respiratory therapist program are able to assume positions of advanced practitioners in less time. Graduates of both CRT and RRT programs at MCCC exceed the national averages for success on board exams. Future employment for certified and registered respiratory therapists is considered excellent nationwide as well as in Southeast Michigan and Northwest Ohio.

The Monroe County Community College Respiratory Therapy Programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation for Respiratory Care (CoARC).

Graduate therapists are prepared to:

- Assume basic or advanced respiratory care positions in hospitals, nursing homes, subacute care centers, rehabilitation facilities, long-term care facilities, home care companies, asthma clinics, sleep disorders laboratories and pulmonary function laboratories;
- Continue higher education, if desired.

## Registered Respiratory Therapist (RRT) Program

Credits

### Required Courses and Sequence

#### Spring/Summer Semester (First Year)

|   |   |
|---|---|
| <sup>1</sup> PSYCH 151 (General Psychology).....    | 3 |
| <sup>1</sup> ENGL 151 (English Composition I) ..... | 3 |

6

#### Fall Semester (First Year)

|   |   |
|---|---|
| RTH 100 (Respiratory Care Techniques I) .....           | 8 |
| RTH 104 (Cardiopulmonary Assessment) .....              | 2 |
| <sup>1</sup> BIOL 158 (Anatomy and Physiology II) ..... | 4 |

14

#### Winter Semester (First Year)

|   |   |
|---|---|
| RTH 110 (Respiratory Care Techniques II).....       | 5 |
| RTH 111 (Respiratory Care Clinical Practice I)..... | 5 |
| RTH 116 (Cardiopulmonary Pathophysiology).....      | 3 |

13

#### Spring/Summer Semester (Second Year)

|   |   |
|---|---|
| RTH 120 (Respiratory Care Techniques III) .....         | 5 |
| RTH 121 (Respiratory Care Clinical Practice II) .....   | 2 |
| RTH 220 (Pharmacology for Respiratory Therapists) ..... | 2 |

9

#### Fall Semester (Second Year)

|  |   |
|--|---|
| RTH 211 (Respiratory Care Clinical Practice III-Therapist) ..... | 5 |
| RTH 212 (Advanced Cardiopulmonary Physiology) .....              | 4 |
| RTH 214 (Adult Critical Care) .....                              | 4 |
| RTH 216 (Perinatal/Pediatric Critical Care).....                 | 2 |

15

#### Winter Semester (Second Year)

|   |   |
|---|---|
| RTH 221 (Respiratory Care Clinical Practice IV) ..... | 5 |
| RTH 222 (Seminar) .....                               | 2 |
| RTH 226 (Respiratory Care Techniques IV) .....        | 3 |
| <sup>1</sup> BIOL 260 (General Microbiology) .....    | 4 |
| <sup>1</sup> POLSC 151 (Political Science) .....      | 3 |

17

### Completion of RRT Program 74

#### <sup>2</sup> Suggested General Electives

|  |   |
|--|---|
| BIOL 259 (Pathophysiology) .....       | 4 |
| CHEM 151, 152, 160 (Chemistry) .....   | 4 |
| HLTSC 110 (Medical Terminology) .....  | 2 |
| Higher Level Humanities Course.....    | 3 |
| MATH 157, 159, 162, 164.....           | 3 |
| PSYCH 254 (Life Span Psychology) ..... | 3 |
| SPCH 151, 152 (Speech) .....           | 3 |

<sup>1</sup> If desired, these courses may be taken prior to the scheduled sequence as long as prerequisites are met.

<sup>2</sup> Not required for degree. May assist in completion of bachelor's degree.

## Certified Respiratory Therapist (CRT) Program

|   | Credits   |
|---|-----------|
| <b>Required Courses and Sequence</b>  |           |
| <b>Spring/Summer Semester (First Year)</b>  |           |
| <sup>1</sup> PSYCH 151 (General Psychology).....  | 3         |
| <sup>1</sup> ENGL 151 (English Composition I) .....   | 3         |
|   | <b>6</b>  |
| <b>Fall Semester (First Year)</b>   |           |
| RTH 100 (Respiratory Care Techniques I) .....   | 8         |
| RTH 104 (Cardiopulmonary Assessment) .....  | 2         |
| <sup>1</sup> BIOL 158 (Anatomy and Physiology II) .....   | 4         |
|   | <b>14</b> |
| <b>Winter Semester (First Year)</b>   |           |
| RTH 110 (Respiratory Care Techniques II).....   | 5         |
| RTH 111 (Respiratory Care Clinical Practice I).....   | 5         |
| RTH 116 (Cardiopulmonary Pathophysiology).....  | 3         |
|   | <b>13</b> |
| <b>Spring/Summer Semester (Second Year)</b>   |           |
| RTH 120 (Respiratory Care Techniques III) .....   | 5         |
| RTH 121 (Respiratory Care Clinical Practice II) .....   | 2         |
| RTH 220 (Pharmacology for Respiratory Therapists) .....   | 2         |
|   | <b>9</b>  |
| <b>Fall Semester (Second Year)</b>  |           |
| <sup>1</sup> POLSC 151 (Political Science).....   | 3         |
| RTH 209 (Respiratory Care Specialty Clinic I) or<br>RTH 216 (Perinatal/Pediatric Critical Care) ..... | 2         |
| RTH 211 (Respiratory Care Clinical<br>Practice III-Therapist) .....                                   | 5         |
| RTH 214 (Adult Critical Care) .....   | 4         |
|   | <b>14</b> |
| <b>Completion of CRT Program 60</b>   |           |

Electives as necessary to complete 60 hours may include but are not limited to the prerequisite courses for the program.

## CRT to RRT Program for Returning Students

|  |           |
|--|-----------|
| <b>Fall Semester</b>                                 |           |
| RTH 212 (Advanced Cardiopulmonary Physiology) .....  | 4         |
| RTH 216 (Perinatal/Pediatric Critical Care) .....    | 2         |
| <sup>1</sup> BIOL 260 (Microbiology).....            | 4         |
|  | <b>10</b> |
| <b>Winter Semester</b>                               |           |
| RTH 219 (Respiratory Care Specialty Clinics II)..... | 4         |
| RTH 222 (Seminar) .....                              | 2         |
| RTH 226 (Respiratory Care Techniques IV).....        | 3         |
|  | <b>9</b>  |

## Respiratory Therapy Program Admission Criteria

Applicants to the respiratory therapy programs are encouraged to apply prior to completing pre-requisites. Admission requirements are subject to change. A student must meet the admission requirements in effect for the class and year students are entering. Both respiratory therapy programs are selective admission.

To be eligible for evaluation and selection, all required information must be included in the student's folder at application deadline, which is June 1 of the year the student wishes to enter the respiratory therapy program. Applications completed after the deadline date will be considered on a space-available basis.

For a student to be considered for either program the MCCC Division of Health Sciences requires:

1. Graduation from high school or successful completion of the G.E.D. (General Education Development) test. Official transcripts from high school must be sent to the MCCC Admissions Office. Official transcripts from all colleges or universities, if transfer credit is desired, sent directly to the MCCC Registrar's office.
2. Completion of CHEM 150, Fundamental Principles of Chemistry, or a higher-level (e.g. 151, 152, etc.) chemistry course with a "C" or better. A challenge exam is available for CHEM 150 through the MCCC Credit by Examination process (Please contact the Science-Mathematics Division for details of this exam at 734-384-4233.). It is required that chemistry be repeated if it has not been taken within 10 years of the application deadline. Completion of BIOL 157 within 5 years of the application deadline may waive the requirement to repeat chemistry that is older than 10 years.
3. Completion of one year of high school-level biology or BIOL 151, Biological Sciences I or BIOL 152 if taken prior to the Fall 2008 Semester with a "C" or better. It is required that biology be repeated if it has not been taken within 10 years of the application deadline date. Completion of BIOL 157 within 5 years of the application deadline may waive the requirement to repeat biology that is older than 10 years.

<sup>1</sup> If desired, these courses may be taken prior to the scheduled sequence as long as prerequisites are met.

4. Completion of MATH 151, Intermediate Algebra with a “C” or better. It is required that algebra or a higher math be repeated if it has not been taken within 10 years of the application deadline;
5. Completion of the computer skills graduation requirement. This can be done by completing CIS 130, WPR 102, WPR 110, MDTC 160 or achieving a satisfactory score on the computer skills assessment (please contact the Admissions and Guidance Office for details of this assessment at 734-384-4104).
6. Completion of BIOL 157 (Anatomy and Physiology I) or MCCC equivalent. It is required that anatomy and physiology be repeated if it has not been taken within 5 years of the application deadline.
7. MELAB (80 percentile) or IBN TOEFL (79-80) tests may be required to show proof of English language proficiency for individuals whose native language is not English.
8. Students in the respiratory therapy program must consent to a criminal history check to comply with the Michigan Compiled Laws, Section 333.20173. No student will be admitted to the program if convicted of a felony or attempt/conspiracy to commit a felony within 15 years preceding the date of admission, or a misdemeanor conviction involving abuse, neglect, assault, battery or criminal sexual conduct or fraud or theft (or similar misdemeanor in state of federal law) against a vulnerable adult within 10 years of the date of admission. Any cost incurred with the criminal check is the student’s responsibility.

Selection of qualified respiratory therapy applicants is done with a numerical process. Meeting the minimum requirements for admission does not insure admission to the program. Applicants to the program tend to be well qualified and only the top 30 candidates are selected each year. For specific information on the point-based selection criteria, please contact the Admissions and Guidance Office.

A physical examination and immunizations are required of students selected for the program at the student’s expense to verify capabilities and general health status.

The position of a certified or registered respiratory therapist involves providing direct care to individuals. As such, it is characterized by the application of verified knowledge in the skillful performance of respiratory care modalities. Therefore, in order to be considered for admission or to be retained in the program, all applicants should possess:

- a. Sufficient visual acuity, such as needed in the accurate interpretation of gauges, preparation and administration of medications and observation necessary for patient assessment and care;
- b. Sufficient auditory perception to receive verbal communication from patients and members of the health team and to assess health needs of people through the use of monitoring devices such as cardiac monitors, stethoscopes, pulse oximeters, mechanical ventilators, fire alarms, etc.;
- c. Sufficient gross and fine motor coordination to respond promptly and to implement skills, including the manipulation of equipment required in meeting health needs;
- d. Sufficient communication skills (speech, reading, writing) to interact with individuals and to communicate their needs promptly and effectively as may be necessary in the individual’s interest;
- e. Sufficient intellectual and emotional functions to plan and implement care for individuals;
- f. Psychological stability allowing the student to perform at the required levels in the clinical portions of the program;
- g. The capability to concentrate for long periods of time in selecting correct techniques, equipment and safety measures to assure maximum care and safety of the patient. Therefore, the applicant must be able to exercise independent judgments under both routine and emergency conditions. A person under the habitual influence of alcohol or consciousness-altering drugs could not meet the above criteria;
- h. The ability to tolerate and function safely in environmental conditions such as exposure to a variety of substances (including latex particles) and conditions within the laboratory and clinical environment: temperature fluctuations; electromagnetic radiation; hazardous waste materials, including chemicals, poisonous substances, blood, body tissue or fluids; loud or unpleasant noises; high humidity; and inhalants such as dust and aerosol mists.

Applicants should have reasonable expectations that they can complete the program of study and meet the educational objectives. Accommodations are unreasonable if they essentially impair or change the curriculum. Questions should be directed to the special populations coordinator in the learning assistance laboratory. In addition to the general College rules, respiratory therapy students are required to adhere to policies and procedures outlined in the Respiratory Therapy Student Handbook.