RESPIRATORY CARE

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Degree: Master of Science

Introduction
The online Master of Science degree program in Respiratory Care (MSRC) is designed for Registered Respiratory Therapists looking to strengthen their career and become an expert in the field.

The MSRC program is offered in a fully online format, structured to fit the busy lifestyle of working students. The 33 credit hour master’s program may be completed in as little as 1 year with full-time study. The MSRC consists of 5 core courses and 6 specialty track courses. The program provides students with the opportunity to select one of the specialty areas below:

• Respiratory Therapeutics
• Respiratory Care Education

Students in the online Master’s Degree in Respiratory Care program can expect to prepare for clinical practice, undergo leadership training in management, supervision, education and research, develop skills to formulate appropriate questions, organize and test hypotheses, and apply research results to practice, among other acquired skills. More information can be found at the Respiratory Care program’s website (https://www.canisius.edu/academics/programs/respiratory-care/).

Admission
Applications are processed on a rolling basis and are considered as they are received for each term. We recommend submitting all materials required for admission at least 30 days prior to the start of the term you wish to begin. Earlier application will ensure the best scheduling options, as some course sections may become unavailable. Terms are eight weeks in length, and students may start in the fall, spring, or summer semesters. The online application can be submitted with no application fee.

To qualify for admission, all students must:

• Complete the graduate admissions application.
• Submit one (1) official undergraduate transcript showing completion of a baccalaureate degree from an accredited institution of higher learning with a minimum GPA of 2.70.
• Submit two (2) letters of recommendation.
• Submit a current resume.
• Provide evidence of current licensure as a Registered Respiratory Therapist.
• Provide a statement of purpose of approximately 500 words explaining your motivation for pursuing the MS in Respiratory Care. The statement may be submitted in the essay section of the graduate application.

Transfer credit: Previous graduate level transfer credits will be assessed on a case-by-case basis.

Program Details

Academic Standing
Students must maintain a GPA of 3.00 to graduate from the program. If the GPA drops below 3.00, the student will be placed on academic probation. If the student does not bring his/her cumulative GPA above 3.00 by the end of the next term, the student may be dismissed from the program. A student may also be academically dismissed from the program by receiving more than 2 grades below B-.

Curriculum

Total credit hours = 33
Every student must complete 21 credit hours of core courses and each of the courses in one (1) of the specialty tracks (12 credits).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 501</td>
<td>Health Promotion and Disease Prevention</td>
<td>3</td>
</tr>
<tr>
<td>RES 512</td>
<td>Pulmonary Function Testing</td>
<td>3</td>
</tr>
<tr>
<td>RES 618</td>
<td>Pulmonary and Cardiac Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>ALH 602</td>
<td>Cardiopulmonary Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>ALH 621</td>
<td>Cardiopulmonary Pharmacodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ALH 631</td>
<td>Research Methods in Allied Health</td>
<td>3</td>
</tr>
<tr>
<td>ALH 632</td>
<td>Data Analysis and Statistics</td>
<td>3</td>
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Specialty Track

Select one of the specialty tracks listed below

Total Credits 12

Specialty Track 1: Respiratory Therapeutics

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<thead>
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<tbody>
<tr>
<td>ALH 503</td>
<td>Medical Nutrition Therapy</td>
<td>3</td>
</tr>
<tr>
<td>RES 612</td>
<td>Advanced Cardiopulmonary Monitoring</td>
<td>3</td>
</tr>
<tr>
<td>RES 615</td>
<td>Advanced Topics in Ventilatory Support</td>
<td>3</td>
</tr>
<tr>
<td>ALH 689</td>
<td>Master's Project 1</td>
<td>3</td>
</tr>
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Total Credits 12

1 Students will receive a grace period of 1 term to complete the thesis without having to register for ALH 700. However, any student who has not completed their final thesis/project by the end of the grace period will be registered for the 1-credit hour course, ALH 700 for that semester, and then for each subsequent semester until the project/thesis is complete.

Specialty Track 2: Respiratory Care Education

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>RES 522</td>
<td>Adult Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>ALH 645</td>
<td>Teaching Technology for Health Leaders</td>
<td>3</td>
</tr>
<tr>
<td>ALH 689</td>
<td>Master's Project</td>
<td>3</td>
</tr>
<tr>
<td>ALH 699</td>
<td>Masters Project II</td>
<td>3</td>
</tr>
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</table>

Total Credits 12
Students will:
their professional career as respiratory therapists.
skills, and attitudes for ensuring professionalism throughout
they build a large collection of research-based knowledge,
continuously assess and refine their professional practice as
Candidates in the Respiratory Care program will
Learning Goal 1
Candidates in the Respiratory Care program will
demonstrate content knowledge and professional knowledge
necessary for successful advanced performance in
respiratory therapy.
Students will:
• Assess and evaluate patient’s cardiopulmonary status, to provide
  appropriate care by applying patient care protocols, and to evaluate the
  medical and cost effectiveness of their care.
Learning Goal 2
Candidates in the Respiratory Care program will
demonstrate professional skills and dispositions necessary
for successful advanced performance in respiratory therapy.
Students will:
• Develop a better understanding of therapeutic techniques, medications,
  and medical devices to evaluate and treat patients with increasingly
  complex cardiopulmonary disorders.
• Develop clinical knowledge to become specialists in the areas of critical
  care, pulmonary function technology and cardiopulmonary diagnostics,
  polysomnography, and other clinical areas, as needed.
Learning Goal 3
Candidates in the Respiratory Care program will
demonstrate willingness to use their advanced skills to
benefit and serve patients who utilize respiratory therapy
services while maintaining an environment that offers a
commitment to social justice with respect and dignity to all.
Students will:
• Model and promote dignity and respect to all patients while
  administering appropriate care and assistance in respiratory care.
Learning Goal 4
Candidates in the Respiratory Care program will
continuously assess and refine their professional practice as
they build a large collection of research-based knowledge,
skills, and attitudes for ensuring professionalism throughout
their professional career as respiratory therapists.
Students will:
• Demonstrate professional educational knowledge necessary to teach at
  college and university based respiratory care educational programs.
• Demonstrate ability to formulate appropriate questions, organize and
  test hypotheses, and apply research results to the practice of respiratory
  care.
• Act with integrity and fairness to ensure a professional system of
  accountability for every student’s academic and social success and will
  model principles of self-awareness, reflective practice, transparency,
  and ethical behavior.
Learning Goal 5
Candidates in the Respiratory Care program will become
acquire the necessary knowledge to become effective
leaders in their field by developing confidence in their
own decision-making with respect to their patients, the
community and their peers.
Students will:
• Demonstrate critical thinking, decision-making, and competence to
  perform newly expected responsibilities.
• Demonstrate leadership in the areas of management, supervision,
  education and research.
• Demonstrate ability to plan, develop, and deliver high quality, cost-
  effective health care services.
Courses
In addition to the courses listed below, courses for this program with the
Allied Health (ALH) prefix can be found on the Professional Studies page
(http://catalog.canisius.edu/graduate/school-education-human-services/
professional-studies/#coursestext).

RES 512 Pulmonary Function Testing 3 Credits
A study of pulmonary diagnostic techniques, with an emphasis on pulmonary
function testing and interpretation.
Offered: every spring, online only.

RES 522 Adult Learning Theory 3 Credits
The concept of lifelong learning has become an increasing reality as adults
continually engage in learning activities, whether through their employer,
institutions of higher education, or self-directed study. This course will
examine the social and psychological aspects of adult development and
learning, including the various motivations of adult learners. Students will
also learn various methods of training and development, as well as specific
instructional practices.
Offered: every fall, online only.

RES 612 Advanced Cardiopulmonary Monitoring 3 Credits
This course is an overview of invasive and noninvasive cardiopulmonary
monitoring, emphasizing theory of operation and techniques. Topics
include physiologic principles of hemodynamic monitoring, pulmonary
artery catheter use, respiratory gas monitoring, noninvasive and minimally-
invasive hemodynamic monitoring, clinical applications of hemodynamic
and respiratory gas monitoring, work of breathing determinations, and
respiratory muscle strength.
Prerequisites: ALH 602 and ALH 621.
Offered: every fall, online only.

RES 615 Advanced Topics in Ventilatory Support 3 Credits
Advanced study in methods of mechanical ventilatory support. Patient
assessment by advanced monitoring is stressed, with attention to patient
ventilator interactions, optimization of ventilatory support, and weaning of
marginal patients. New ventilation technology and modes of support are
discussed.
Prerequisite: ALH 602 and 621
Offered: every spring, online only.
RES 618 Pulmonary and Cardiac Rehabilitation 3 Credits
This course explores pulmonary/cardiac rehabilitation clinics and combines exercise training with behavioral and educational programs designed to help patients with COPD and cardiac issues control symptoms and improve day-to-day activities. We will look at the team approach—patients work closely with their doctors; nurses; respiratory, physical, and occupational therapists; psychologists, exercise specialists; and dietitians. We will also explore the differences between cardiac and pulmonary rehabilitation.
Offered: every spring, online only.