

Respiratory Therapy

Associate of Applied Science Degree

The general objective of the Respiratory Therapy program is to prepare graduates with the knowledge, skills, professional attitudes and behaviors necessary to attain state licensing and national credentialing for a career in respiratory therapy. Graduates become a vital part of the healthcare team in a variety of settings including hospitals, long-term care facilities, home health agencies, pulmonary rehabilitation centers and physician offices.

The program has two components: a pre-professional phase that includes all the general education and science prerequisites, and a professional phase that includes respiratory therapy specific course work and clinical education. Courses in the pre-professional phase of the program may be taken on a full-time or part-time basis during day or evening hours. Full-time day attendance is required for the professional phase of the program. Students seeking admission into the Respiratory Therapy program must have a GPA of 2.5 or better and a grade of C or better in all their pre-professional phase courses. A professional phase application form must be completed by March 15 for admission into the fall professional phase.

A statewide criminal record search through the New Jersey State Police and a National Criminal History Database Search is performed on all students upon initial acceptance into the professional phase of the program and annually thereafter. If a record is found as a result of the criminal record searches, admission into the professional phase of the program may be denied. If there is no record upon admission but subsequent searches result in a record found, the student may be immediately dismissed from the program.

When a graduate applies for licensure as a respiratory care practitioner in New Jersey, the New Jersey Board of Respiratory Care requires a Criminal History Background Check. If the Criminal History Background Check reveals a criminal conviction, a review of the application by the Board of Respiratory Care is required.

Students accepted into the program are responsible for obtaining malpractice insurance and must have health clearance through the college's Health Services. Certification in Basic Life Support (BLS) for Healthcare Providers by the American Heart Association is also required.

The Respiratory Therapy program maintains a zero-tolerance policy regarding substance abuse. Respiratory Therapy students must be free of chemical impairment during participation in all parts of the Respiratory Therapy program including classroom, laboratory and clinical settings. A urine drug screening test is performed on all students upon initial acceptance into the professional phase of the program. If the test is positive for illegal substances, admission into the professional phase of the program is denied. In addition, illegal use of prescribed substances will result in denial of admission into the professional phase of the program.

For more information, visit the [Respiratory Therapy \(http://www.ccm.edu/academics/divdep/health-professions-natural-sciences/departments-of-allied-health/respiratory-therapy/\)](http://www.ccm.edu/academics/divdep/health-professions-natural-sciences/departments-of-allied-health/respiratory-therapy/) website.

Degrees

AAS Respiratory Therapy

(P3850)

General Education Foundation

Communication		6
ENG-111	English Composition I	
ENG-112	English Composition II	
Math-Science-Technology		3
MAT-110	College Algebra	
Social Science or Humanities		3
PSY-113	General Psychology	
General Education Electives		8
BIO-101	Anatomy and Physiology I	
BIO-102	Anatomy and Physiology II	
General Education Foundation Credits		20

Respiratory Therapy Core

CHM-117	Introductory Chemistry Lecture	3
CHM-118	Introductory Chemistry Laboratory	1
BIO-215	Microbiology	4
PHY-103	Concepts of Physics	4
Humanities, Diversity, Communication Elective	Consult with Advisor	3
Respiratory Therapy Core Credits		15

Professional Phase

RTH-199	Respiratory Therapeutics	5
RTH-202	Cardiopulmonary Pharmacology	2
RTH-203	Cardiopulmonary Physiology	2
RTH-204	Cardiopulmonary Evaluation	3
RTH-205	Cardiopulmonary Pathophysiology	2
RTH-206	Mechanical Ventilation	4
RTH-207	Neonatal and Pediatric Respiratory Care	2
RTH-210	Clinical Practice I	3
RTH-211	Clinical Practice II	3
RTH-212	Clinical Practice III	4
RTH-208	Advanced Respiratory Care	2
Professional Phase Credits		32
Total Credits		67

Due to continual program revisions mandated by the accrediting agencies and/or changes in state mandated requirements, students should consult their academic advisors when selecting courses.

Science courses completed by students prior to entering a Respiratory Therapy course must be less than seven years old. If the science courses exceed the seven-year limit, students can prove their competency by testing or they must retake the courses.

The program is accredited through the Commission on Accreditation for Respiratory Care (COARC) www.CoARC.com (<http://www.CoARC.com>) . Graduates are eligible to apply for New Jersey State licensure and advanced credentialing as a Registered Respiratory Therapist (National Board for Respiratory Care) www.NBRC.org (<http://www.NBRC.org>) .

Faculty

Gracielle Fong, MSHE, RRT, RRT-NPS
Program Director
Assistant Chairperson, Allied Health
Assistant Professor, Respiratory Therapy Program
M.S., Health Education from Purdue University
B.S., Montclair State University
A.A.S., Bergen Community College
EH 128 973-328-5423 gfang@ccm.edu

Salma Monaco, AAS, RRT
Director of Clinical Education
Instructor
A.A.S County College of Morris
EH 129 973-328-5423 smonaco@ccm.edu

Courses

RTH-199. Respiratory Therapeutics. 5 Credits.

RECI 15 hrs LECT 60 hrs LAB 45 hrs

An introduction to respiratory care, including history of the profession, ethical and legal responsibilities of the respiratory therapist; medical terminology, basic respiratory care procedures including the physics, physiology and administration of medical gas therapy, basic patient communication and assessment skills. Basic respiratory care procedures, humidity and aerosol therapy, hyperinflation therapy, chest physiotherapy and bronchial hygiene; an overview of microbiology as applied to respiratory care; infection control; and equipment sterilization procedures. Course requires that students have completed the pre-professional phase of the Respiratory Therapy program and have permission of the program director to enroll.

Prerequisites: Permission of Program Director

Corequisites: RTH-202, RTH-203, RTH-210

Additional Fees: Course fee applies.

RTH-202. Cardiopulmonary Pharmacology. 2 Credits.

LECT 30 hrs

This course is an overview of general pharmacology, including routes of administration, federal regulations, dosages and calculations, and safety precautions. It provides an in-depth study of drugs administered to the respiratory patient, including chemical structure, mechanism of action, indications, contraindications, physiologic effects and side-effects.

Prerequisites: BIO-101, BIO-102, CHM-117 and CHM-118 and permission of program director

Corequisites: RTH-199, RTH-203, RTH-210.

RTH-203. Cardiopulmonary Physiology. 2 Credits.

LECT 30 hrs

A study of physiologic mechanisms of the cardiopulmonary system, including a review of the anatomy of the pulmonary and circulatory systems; ventilatory mechanics, gas diffusion, physiology of internal and external respiration, oxygen transport, carbon dioxide elimination, acid-base balance, ventilation perfusion relationships; and the neurologic control of ventilation.

Prerequisites: BIO-101, BIO-102 and permission of program director

Corequisites: RTH-199, RTH-202, RTH-210.

RTH-204. Cardiopulmonary Evaluation. 3 Credits.

LECT 30 hrs LAB 30 hrs

This course will cover the techniques of patient assessment and diagnostic evaluation of the cardiopulmonary system. Topics covered include: arterial blood gas analysis, pulmonary function testing, non-invasive monitoring of oxygenation and ventilation, an overview of laboratory tests, chest radiographs, electrocardiograph interpretation and hemodynamic monitoring.

Prerequisites: RTH-199, RTH-202, RTH-203, RTH-210 and permission of Program Director

Corequisites: RTH-205, RTH-206 and RTH-211

Additional Fees: Course fee applies.

RTH-205. Cardiopulmonary Pathophysiology. 2 Credits.

LECT 30 hrs

An overview of the pathophysiology of diseases of the cardiopulmonary system with an emphasis on pathophysiologic processes such as hypoxemia, hypoventilation, diffusion defects and ventilation perfusion mismatch; a survey of diseases encountered by the respiratory therapist, including pathophysiology, diagnostic methods and findings, clinical manifestations, treatment and prognosis.

Prerequisites: RTH-203 and permission of program director.

RTH-206. Mechanical Ventilation. 4 Credits.

LECT 45 hrs LAB 45 hrs

Techniques of airway management and the provision of mechanical ventilation; includes types of airways and appropriate uses; the physics and physiology of mechanical ventilation; classification of mechanical ventilators; indications for clinical application and complications of mechanical ventilation; management and monitoring of the patient requiring ventilatory support; and appropriate methods of withdrawing ventilatory support.

Prerequisites: RTH-199, RTH-202, RTH-203, RTH-210 and permission of program director

Corequisites: RTH-204, RTH-205 and RTH-211

Additional Fees: Course fee applies.

RTH-207. Neonatal and Pediatric Respiratory Care. 2 Credits.

LECT 30 hrs

An overview of fetal development of the cardiopulmonary system with an emphasis on circulatory transitions and respiratory complications occurring at birth and in the neonatal period; a review of neonatal and pediatric respiratory disorders with an emphasis on clinical findings and treatment; a survey of respiratory care procedures as applied to the neonatal and pediatric patient, including oxygen therapy, humidity and aerosol therapy, diagnostic testing and mechanical ventilation.

Prerequisites: RTH-204, RTH-205, RTH-206, RTH-211 and permission of program director

Corequisites: RTH-208 and RTH-212.

RTH-208. Advanced Respiratory Care. 2 Credits.

LECT 30 hrs

A survey of current events and state-of-the-art modalities in respiratory care; includes respiratory care in non-traditional settings, cardiopulmonary rehabilitation, controversies in clinical practice, and changes in health care affecting the respiratory care profession. Students are required to complete advanced cardiac life support (ACLS) certification through the American Heart Association.

Prerequisites: RTH-204, RTH-205, RTH-206, RTH-211 and permission of program director

Corequisites: RTH-207 and RTH-212.

RTH-210. Clinical Practice I. 3 Credits.

CLIN 240 hrs

A supervised clinical application of the respiratory care procedures covered in Respiratory Therapeutics including chart review, patient and health professional communication, basic patient assessment, assembly and monitoring of oxygen therapy, aerosol and humidity therapy, aerosolized drug administration, hyperinflation therapy, bronchial hygiene and evaluation of patient response.

Prerequisites: Permission of Program Director**Corequisites:** RTH-199, RTH-202 and RTH-203**Additional Fees:** Course fee applies.**RTH-211. Clinical Practice II. 3 Credits.**

CLIN 240 hrs

Continued refinement of the skills covered in Clinical Practice I, in a general care environment, with an emphasis on clinical competence in providing basic respiratory care; followed by an introduction to the critical care environment and to respiratory care of the critically ill patient, with an emphasis on patient assessment and monitoring skills, and patient safety. Supervised application of the skills covered in Mechanical Ventilation and Cardiopulmonary Evaluation, including specialty rotations in ECG, the operating room, pulmonary function testing and blood gas laboratory, and physician offices.

Prerequisites: RTH-199, RTH-202, RTH-203, RTH-210 and permission of program director**Corequisites:** RTH-204, RTH-205 and RTH-206**Additional Fees:** Course fee applies.**RTH-212. Clinical Practice III. 4 Credits.**

CLIN 240 hrs

Continued refinement of the skills needed to function in a critical care environment with an emphasis on clinical competence in hemodynamic and advanced monitoring and management of the patient on mechanical ventilation. An emphasis is placed on interaction with other members of the healthcare team, patient care planning, clinical decision making and independent practice. Includes specialty rotations in neonatal and pediatric respiratory care, post open heart recovery and home care. The clinical fee includes the cost of the required National Board of Respiratory Care Self-Assessment Examination (NBRC SAE).

Prerequisites: RTH-204, RTH-205, RTH-206, RTH-210, RTH-211 and permission of program director**Corequisites:** RTH-207 and RTH-208**Additional Fees:** Course fee applies.