

# RT - RESPIRATORY CARE

## RT111 Cardiopulmonary Physiology

Credits 6

Fall

**Registration Requirement:** Acceptance into the Respiratory Care program.

An introduction to normal cardiopulmonary structure and function. Fundamental concepts in physics and chemistry, cardiac electrophysiology, hemodynamics, circulatory regulation, ventilation, respiratory mechanics, gas exchange, acid-base regulation and control of breathing are presented along with cardiopulmonary testing concepts.

## RT121 Respiratory Care Procedures

Credits 5

Winter

**Registration Requirement:** RT111 with a grade of "C" or better. Concurrent enrollment in RT122 or instructor consent is required.

This course introduces the student to therapeutic modalities of respiratory care. Topics include oxygen therapy, gas storage and delivery systems, humidity and aerosol therapy, bronchial hygiene, artificial airways, cardiopulmonary resuscitation, infection control, medical ethics and charting.

**Additional Course Fee:** \$25.00

## RT122 Respiratory Care Procedures Lab

Credits 2

Winter

**Registration Requirement:** RT111 with a grade of "C" or better; Concurrent enrollment in RT121; or instructor consent.

Laboratory demonstrations and activities designed to reinforce RT121 lecture.

**Additional Course Fee:** \$25.00

## RT131 Respiratory Diseases and Pharmacology

Credits 6

Winter

**Registration Requirement:** RT111 with a grade of "C" or better; or instructor consent.

This course includes a study of respiratory diseases and their treatment, including the pharmacology of respiratory care. Included diseases are chronic obstructive pulmonary diseases, infectious pulmonary diseases, neuromuscular diseases and lung cancer.

## RT132 Pulmonary Assessment

Credits 4

Spring

**Registration Requirement:** RT131 and RT121, each with a grade of "C" or better.

Physical examination, clinical laboratory, pulmonary imaging, electrocardiographic, spirometric, sleep studies, hemodynamic monitoring, respiratory monitoring of the respiratory patient and physician case studies are presented in this lecture/demonstration course.

**Additional Course Fee:** \$252.00

## RT141 Mechanical Ventilation

Credits 5

Spring

**Registration Requirement:** RT111, RT121 and RT122, all courses with grades of "C" or better. Concurrent enrollment in RT142 is required. This course introduces mechanical aids to ventilation as commonly employed in the clinical setting. Topics include physiological effects of mechanical ventilation, classification of modern ventilators and clinical applications.

**Additional Course Fee:** \$342.00

## RT142 Mechanical Ventilation Lab

Credits 2

Spring

**Registration Requirement:** RT111 and RT121, each with a grade of "C" or better. Concurrent enrollment in RT141 is required.

This laboratory course provides hands-on experience with selected ventilators and techniques discussed in RT141.

**Additional Course Fee:** \$200.00

## RT150 Clinical Clerkship

Credit 1

Spring

**Registration Requirement:** RT121 with a grade of "C" or better. Concurrent enrollment in RT132 is required.

This course is an introduction to the hospital setting, patient assessment and respiratory care delivery.

**Additional Course Fee:** \$100.00

## RT220 Neonatal/Pediatric Respiratory Care

Credits 4

Fall

**Registration Requirement:** RT121, RT122, RT131, RT141 and RT142, each with a grade of "C" or better; or instructor consent.

This course provides discussion and laboratory activity addressing the cardiopulmonary physiologic changes and development from fetal life through adolescence. In addition, common respiratory and cardiac disorders of this population are presented and their assessment and treatment demonstrated.

**Additional Course Fee:** \$25.00

## RT231 Cardiopulmonary Critical Care I

Credits 3

Winter

**Registration Requirement:** RT220 and RT251, each with a grade of "C" or better.

This is the first of a two-term sequence of courses that is designed to familiarize the student with topics and techniques encountered in the care of critically ill patients. Content includes discussion of data collection, assessment, pathophysiology and treatment of various life threatening cardiopulmonary conditions, ACLS theory, ventilatory support and other forms of life support. In addition and where appropriate, discussion of rehabilitation, health promotion, disease prevention and legal and ethical issues are presented.

**Additional Course Fee:** \$200.00

**RT232 Cardiopulmonary Critical Care II**

Credits 3

Spring

**Registration Requirement:** RT231 and RT252, each with a grade of "C" or better.

This is the second of a two-term sequence of courses that is designed to familiarize the student with topics and techniques encountered in the care of critically ill patients. Content includes discussion of data collection, assessment, pathophysiology and treatment of various life threatening cardiopulmonary conditions, ACLS theory, ventilatory support and other forms of life support. In addition and where appropriate, discussion of rehabilitation, health promotion, disease prevention and legal and ethical issues are presented.

**Additional Course Fee:** \$45.00

**RT251 Clinical Practice I**

Credits 9

Fall

**Registration Requirement:** RT121, RT122, RT131, RT132, RT141, RT142, RT150, BI234, and BI121 and BI122 or BI231, BI232 and BI233, all courses with grades of "C" or better.

This is the first of a sequence of hospital-based laboratory/clinical courses. It is designed to be an introduction to basic respiratory care skill with an orientation to adult critical care areas.

**Additional Course Fee:** \$400.00

**RT252 Clinical Practice II**

Credits 9

Winter

**Registration Requirement:** RT251 with a grade of "C" or better.

This hospital-based laboratory/clinical course is designed to familiarize the student with all areas of critical care. The student also is familiarized with special areas including pulmonary function lab, home care and rehabilitation. The student also gains skills in advanced assessment and clinical decision making.

**Additional Course Fee:** \$400.00

**RT253 Clinical Practice III**

Credits 9

Spring

**Registration Requirement:** RT252 with a grade of "C" or better.

This course is a continuation of RT252 and will continue the hospital-based laboratory/clinical course to familiarize the student with all areas of critical care. The student also is familiarized with special areas including pulmonary function lab, home care and rehabilitation. The student gains skills in advanced assessment and clinical decision making.

**Additional Course Fee:** \$400.00

*Course fees are subject to change. Additional section fees (web, hybrid, etc.) may apply.*