

RT

Courses

RT 100 Introduction to Respiratory Care

1 Credit. 1 Lecture Hour. 0 Lab Hour.

A course on fundamental concepts in the field of Respiratory Care.

Topics include: history of respiratory care, time management, communication, team building, diversity, patient rights and confidentiality, professional ethics, and death and dying.

Prerequisites: Respiratory Care Program Chair consent

Instructor Consent Required

RT 101 Respiratory Care Science 1

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on fundamentals of pulmonary patient care. Topics include: patient assessment, moving, and positioning; oxygen therapy; humidity and aerosol therapies; hospital safety; infection control; respiratory pharmacology; and medical ethics.

Prerequisites: PHY 110 or high school physics within the past 6 years (minimum grade C), and Respiratory Care Technology Program Chair consent

Instructor Consent Required

RT 102 Respiratory Care Science 2

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A continuation of RT 101. Topics include: artificial airways, airway suctioning, cleaning and sterilizing equipment, expansion therapy, bronchial hygiene therapies, pulmonary imaging, intubation, non-invasive ventilation, newborn development, and newborn congenital diseases and conditions.

Prerequisites: RT 100 and RT 101 and RT 172 (minimum grade C for all)

RT 103 Mechanical Ventilation

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on infant and adult mechanical ventilation. Topics include: indications, assessment, application, monitoring, weaning, and modes of mechanical ventilation.

Prerequisites: RT 102 and RT 111 and RT 173 (minimum grade C for all)

RT 111 Respiratory Care Clinical Practice 1

2 Credits. 1 Lecture Hour. 8 Lab Hours.

Students practice using respiratory care skills for basic floor therapy in the hospital environment. Topics include: medications administration, oxygen therapy, bronchial hygiene, expansion therapy, and humidification.

Prerequisites: RT 100 and RT 101 and RT 172 (minimum grade C for all)

RT 112 Respiratory Care Clinical Practice 2

2 Credits. 1 Lecture Hour. 16 Lab Hours.

A continuation of RT 111. Students practice respiratory care skills and responsibilities in a hospital setting. Topics include: critical care and mechanical ventilation, pulmonary functions, operating room observation, and hyperbaric oxygen.

Prerequisites: RT 102 and RT 111 and RT 173 (minimum grade C for all)

RT 172 Cardiopulmonary Anatomy and Physiology

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on the anatomy and physiology of the respiratory and circulatory systems. Topics include: ventilation, diffusion, O₂ and CO₂ transport, acid/base balance, circulation, ventilation/perfusion (V/Q) relationships, compliance, resistance, deadspace, and basic ECG interpretation

Prerequisites: Respiratory Care Program Chair consent
Instructor Consent Required

RT 173 Cardiopulmonary Disease

4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on cardiopulmonary diseases and the diagnosis, treatment, and prognosis of each disease. Topics include: pulmonary diseases and conditions, pulmonary function testing and interpretation, and use of testing in diagnosing pulmonary diseases.

Prerequisites: RT 100 and RT 101 and RT 172 (minimum grade C for all)

RT 201 Advanced Respiratory Critical Care

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on caring for the critically ill respiratory care patient. Topics include: critical care assessment, medications, hemodynamic monitoring, and critical diseases and conditions.

Prerequisites: RT 103 and RT 112 (minimum grade C for both)

RT 202 Specialties in Respiratory Care

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A course on specialized areas of respiratory care and emerging roles for the respiratory therapist. Topics include: bronchoscopy, tracheostomy, burn care, chest tubes, metabolic testing, exercise testing, pulmonary rehabilitation, capnography, and other specialty areas.

Prerequisites: RT 103 and RT 112 (minimum grade C for both)

RT 203 Respiratory Care Seminar

2 Credits. 1 Lecture Hour. 2 Lab Hours.

Students review theory and practice in respiratory care to prepare for national certification examinations. Topics include: Advanced Cardiovascular Life Support (ACLS), starting intravenous therapy (IVs), and transitioning from student to professional.

Prerequisites: RT 201 and RT 202 and RT 211 (minimum grade C for all)

RT 204 Respiratory Care Capstone

1 Credit. 0 Lecture Hour. 2 Lab Hours.

Students complete a research project in an approved specialty area in the field of respiratory care.

Prerequisites: RT 201 and RT 202 and RT 211 (minimum grade C for all)

RT 211 Respiratory Clinical Practice 3

2 Credits. 1 Lecture Hour. 16 Lab Hours.

A continuation of RT 112. Students practice skills and responsibilities for care of ventilator patients in the intensive care unit of a hospital. Topics include: mechanical ventilation, respiratory equipment, home care, neonatal and pediatrics care, and pulmonary rehabilitation.

Prerequisites: RT 103 and RT 112 (minimum grade C for both)

RT 212 Respiratory Clinical Practice 4

2 Credits. 1 Lecture Hour. 16 Lab Hours.

A continuation of RT 211. Students complete an internship and practice respiratory care skills and responsibilities in multiple healthcare settings. Clinical rotations include: ECG and vascular testing, burn care, extended care facilities, and critical care.

Prerequisites: RT 201 and RT 202 and RT 211 (minimum grade C for all)