

# RESPIRATORY CARE (RESP)

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## RESP 100 - Introduction to Respiratory Care (2)

*Prerequisite: BSCI 201 or BI 103*  
(formerly RC 100)

Introduces respiratory care as a profession, including the healthcare environment and the respiratory care practitioner's role on the healthcare team. Specific topics include the holistic concept of patient care, psychosocial issues with particular attention to death and dying, medicolegal and ethical considerations of respiratory care, and professional interpersonal relationships. Topics also include medical terminology, infection control techniques, and physical assessment methods.

*This course is only offered in the Fall.*

## RESP 101 - Gas Exchange Physiology (2)

*Prerequisite: BSCI 201 or BI 103*  
(formerly RC 104)

Focuses on the structure and function of the lung as related to gas exchange, diffusion, perfusion and ventilation-perfusion relationships. Emphasizes oxygen and carbon dioxide transport abnormalities in the gas exchange mechanisms. This will lead to and be integrated with clinical applications and interpretations of arterial blood-gas analysis.

*This course is only offered in the Spring.*

## RESP 102 - Fundamentals of Respiratory Care (4)

*Prerequisite: BSCI 201 or BI 103*  
(formerly RC 102)

Introduces basic respiratory care modalities, including medical gas therapy, aerosol and humidity therapy, hyperinflation therapy, and bronchial hygiene therapy. Laboratory portion of the course provides practical experience performing procedures presented in the didactic portion of the course in a controlled laboratory setting.

*This course is only offered in the Fall.*

## RESP 103 - Pharmacology (3)

*Prerequisites: RESP 100 and RESP 102; Prerequisite or Co-requisite: (BSCI 202 or BI 104)*  
(formerly RC 103)

Introduces the various classifications of drugs, including drug action and effects, site of activity, recommended dosages and toxicity. Emphasis on anesthetics, bronchodilators, mucokinetics, cardiovascular agents and drugs affecting the nervous system as they apply to respiratory therapy.

*This course is only offered in the Fall.*

## RESP 105 - Cardiopulmonary and Renal Anatomy and Physiology (3)

*Prerequisites: (BSCI 202 or BI 104) and RESP 100 and (RESP 101 or RC 104) and RESP 102*  
(formerly RC 105)

Emphasizes the structure and function of the pulmonary, cardiovascular and renal systems as they relate to respiratory care.

*This course is only offered in the Spring.*

## RESP 107 - Principles of Mechanical Ventilation (4)

*Prerequisites: (BSCI 202 or BI 104) and RESP 100 and (RESP 101 or RC 104) and RESP 102*

(formerly RC 107)

Explores general principles of gas physics, principles of airway management, intubation and the theory and operation of mechanical ventilators. Includes special problems associated with both short-term and long-term care of patients requiring artificial ventilation. Integrates arterial blood gas studies with course topics. The laboratory portion of the course takes the principles and procedures presented in lecture and applies them via procedure competency testing and simulated clinical situations.

*This course is only offered in the Spring.*

## RESP 109 - Clinical Practicum I (2)

*Prerequisites: (BSCI 202 or BI 104) and RESP 100 and (RESP 101 or RC 104) and RESP 102*

(formerly RC 109)

Introduces the hospital environment and patient care, including patients charts and record-keeping. Includes practical experience in using basic respiratory therapy equipment and applying it to patient care. Students perform basic respiratory therapy modalities such as oxygen therapy, aerosol therapy, IPPB, incentive spirometry and chest physiotherapy and postural drainage.

*This course is only offered in the Spring.*

## RESP 110 - Clinical Practicum II (2)

*Prerequisites: RESP 103, RESP 105, RESP 107, RESP 109*  
(formerly RC 110)

Teaches proficiency in administering basic respiratory care procedures and handling every aspect of general care. Introduces the intensive care environment and the theory and practical use of mechanical ventilators. Includes practical experience in obtaining arterial blood gases.

*This course is only offered in the Summer.*

## RESP 200 - Pulmonary Diagnostics (2)

*Prerequisite: RESP 110*  
(formerly RC 206)

Includes a detailed analysis of all major parameters of ventilatory measurement as well as diagnostic significance of deviations from predicted normal values.

*This course is only offered in the Fall.*

## RESP 201 - Cardiac Monitoring and Diagnostics (4)

*Prerequisite: RESP 110*  
(formerly RC 204)

Presents the theory, equipment, and techniques involved in cardiac monitoring. Recognition of normal values and normal waveforms will be emphasized as a reference for identifying abnormal and life threatening changes. Students must satisfactorily complete competency tests, including EKG monitoring and assembly of fluid filled monitoring systems.

*This course is only offered in the Fall.*

## RESP 202 - Neonatal and Pediatric Respiratory Care (3)

*Prerequisite: RESP 110*  
(formerly RC 202)

Provides an in-depth perspective of pediatric and neonatal respiratory care. Includes high-risk deliveries, abnormalities and diseases, and the interventions used. Discusses mechanical ventilation for the neonatal and pediatric patient. Students must satisfactorily complete competency tests on the operation of neonatal and pediatric ventilators.

*This course is only offered in the Fall.*

**RESP 203 - Clinical Practicum III (2)**

*Prerequisite: RESP 110*

(formerly RC 208)

Develops advanced skills in the critical care environment regarding management of the patient dependent upon mechanical ventilation.

Practical experiences gained in hemodynamic monitoring.

*This course is only offered in the Fall.*

**RESP 204 - Pulmonary Rehabilitation and Home Care (2)**

*Prerequisites: (RESP 200 or RC 206) and (RESP 201 or RC 204) and RESP 202 and (RESP 203 or RC 208)*

(formerly RC 203)

Reviews all of the assessment skills, equipment, and interventions presented throughout the program, and applies them to the care of patients in alternative settings. Focus is on teaching patients to live with their diseases. A capstone course for the respiratory care program.

*This course is only offered in the Spring.*

**RESP 205 - Professional Seminar (2)**

*Prerequisites: (RESP 200 or RC 206) and (RESP 201 or RC 204) and RESP 202 and (RESP 203 or RC 208)*

(formerly RC 205)

Prepares students for entry into clinical practice. Emphasizes preparation for the entry level and registry examinations given by the National Board for Respiratory Care. Provides familiarization with the prospective test matrices and uses both text and computer review materials. Reviews and discusses assigned current readings from various journals related to respiratory therapy.

*This course is only offered in the Spring.*

**RESP 207 - Cardiopulmonary and Renal Pathophysiology Review (3)**

*Prerequisites: (RESP 200 or RC 206) and (RESP 201 or RC 204) and RESP 202 and (RESP 203 or RC 208)*

(formerly RC 207)

Examines the effects of various diseases upon the cardiopulmonary and renal systems. Discusses both acute and long-term aspects of ventilatory-circulatory impairment. Emphasis on diseases that cause insult to the respiratory system.

*This course is only offered in the Spring.*

**RESP 209 - Clinical Practicum IV (2)**

*Prerequisites: (RESP 200 or RC 206) and (RESP 201 or RC 204) and RESP 202 and (RESP 203 or RC 208)*

(formerly RC 209)

Provides clinical experience in the pediatric/neonatal environment as well as advanced adult critical care. Students rotate through neonatal and pediatric intensive care units and gain practical experience with mechanical ventilator management and various therapeutic techniques for this patient population. Students also rotate through various adult critical care areas.

*This course is only offered in the Spring.*