

Respiratory Therapy (RESP)

RESP 1100 Fundamentals of Respiratory Therapy

4 Credits

Prerequisite: Admission to Respiratory Therapy program.

This course introduces students to the field of respiratory care, including the role of the respiratory therapist within the healthcare system. Students will learn to perform physical assessments and use equipment that monitors the cardiopulmonary system. The course also addresses the use of oxygen administration, humidification of the airway, medical terminology, and basic principles of fluid physics. (6 contact hours: 3 lecture, 3 lab)

RESP 1200 Cardiopulmonary Physiology

3 Credits

Prerequisite: Admission to Respiratory Therapy program.

This course provides a detailed analysis of cardiopulmonary anatomy and physiology, arterial blood gas interpretation, gas laws, and basic principles of fluid physics related to respiratory mechanics. The course also covers the central nervous and renal systems, ventilation/perfusion relationships, an introduction to hemodynamic monitoring, and basic interpretation of electrocardiograms. (3 contact hours)

RESP 1300 Cardiopulmonary Therapeutics

5 Credits

Prerequisite: RESP 1100, RESP 1200.

This course discusses fundamental respiratory therapy procedures and competencies. Students will apply them to simulated case studies, and practice them in the laboratory and clinical facilities under the supervision of a Registered Respiratory Therapist. (12 contact hours: 3 lecture, 3 lab, 6 clinical)

RESP 1400 Pharmacology

2 Credits

Prerequisite: RESP 1100, RESP 1200.

This introductory course covers the pharmacology of respiratory care, which includes a review of the autonomic nervous system, dosage calculations, pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. Students study the clinical indications, mode of action, doses, hazards, and side effects related to drugs used in respiratory care. (2 contact hours)

RESP 1500 Cardiopulmonary Pathology

3 Credits

Prerequisite: RESP 1100, RESP 1200.

This course serves as an introduction to respiratory diseases including etiology, pathophysiology, clinical manifestations, treatment, and possible complications. (3 contact hours)

RESP 1600 Advanced Diagnostics

5 Credits

Prerequisite: RESP 1300, RESP 1400.

This advanced course covers diagnostics related to the cardiopulmonary system, including pulmonary function studies and chest x-ray interpretation. Students will apply diagnostics to clinical problem solving. (17 contact hours: 2 lecture, 3 lab, 12 clinical)

RESP 1800 Introduction to Pediatric Respiratory Therapy

2 Credits

Prerequisite: RESP 1300, RESP 1400.

This course introduces the study of embryology, neonatology, and pediatric respiratory care. It also includes a discussion of neonatal and pediatric disease. (2 contact hours)

RESP 2100 Mechanical Ventilation

7 Credits

Prerequisite: RESP 1500, RESP 1600, RESP 1800.

This course serves as an introduction to mechanical ventilation and the acute care setting. Students will discuss and apply the competencies associated with this form of therapy to patient cases. (23 contact hours: 4 lecture, 3 lab, 16 clinical)

RESP 2200 Hemodynamics and Electrocardiography

3 Credits

Prerequisite: RESP 1500, RESP 1600, RESP 1800.

This specialized course provides a study of the cardiovascular system, including invasive and non-invasive evaluation, pharmacology related to this system, and its application to patient care. (3 contact hours)

RESP 2300 Long Term Care and Rehabilitation**6 Credits***Prerequisite: RESP 2100, RESP 2200.*

This specialized course applies respiratory care to long-term care and rehabilitation. The course discusses the role of the therapist outside the acute care setting. Students will apply current standards of practice to patient care.

(22 contact hours: 3 lecture, 3 lab, 16 clinical)

RESP 2400 Advanced Therapeutics**3 Credits***Prerequisite: RESP 2100, RESP 2200.*

This advanced course evaluates the application of research to respiratory care and the therapist's role. The course also includes classroom discussion of the economics and legal aspects of healthcare affecting the practice of respiratory care.

(3 contact hours)

RESP 2900 Special Topics in Respiratory Therapy**1-3 Credits**

These specialized courses provide current or soon-to-be practitioners with in-depth examinations of respiratory care topics not covered in detail elsewhere in the curriculum. The courses provide students with opportunities to study and acquire skills beyond entry level.

(1-3 contact hours)