RESPIRATORY THERAPY (RESP)

RESP 1110 — Cardiopulmonary & Renal Structure & Function
Credits: 2
Lecture hours: 2
The Cardiopulmonary Renal Structure and Function course provides a detailed study of the anatomy and physiology of the cardiopulmonary system, with particular attention to its integration with renal function. Explores the structure and function of the heart, lungs, and kidneys and how these systems work together to maintain homeostasis. Emphasizes the physiological mechanisms behind respiratory and cardiovascular health and disease.

RESP 1150 — Respiratory Care Foundations I
Typically Offered: Spring
Credits: 5
Lecture hours: 5
Respiratory Care Foundations I introduces essential principles of respiratory care, focusing on the foundational aspects of patient assessment, pathophysiology, pharmacology, and basic diagnostic techniques. It describes underlying disease processes affecting patients, identifies key pharmacological treatments used in respiratory therapy, and applies basic diagnostic tools and techniques for evaluating respiratory function.

RESP 1300 — Respiratory Care Equipment & Procedures
Typically Offered: Spring
Credits: 4
Lecture hours: 4
This course introduces essential respiratory care equipment and procedures. Explores the principles, functions, and applications of respiratory care devices, focusing on the theoretical foundations required to safely and effectively support patients in clinical settings. Emphasizes respiratory treatment options, patient safety, infection control practices, and the identification and troubleshooting of common equipment issues.
Corequisites: RESP 1305

RESP 1305 — Respiratory Care Equipment & Procedures Lab
Typically Offered: Spring
Credits: 2
Lab hours: 4
Respiratory Care Equipment & Procedures Lab provides students with hands-on experience in using essential respiratory care devices and performing procedures in a lab setting. Engages students in practical exercises and simulations that emphasize the safe and effective application of respiratory care equipment, patient assessment, patient safety, infection control protocols, and troubleshooting common equipment issues.
Corequisites: RESP 1300

RESP 1705 — Clinical Rotation I
Typically Offered: Spring
Credits: 2
Lecture hours: 2
This course provides students with hands-on experience in patient assessment and the application of basic respiratory therapies in a real-world healthcare setting. It includes the use of respiratory devices and basic interventions for patients with cardiopulmonary conditions. The course emphasizes developing skills in patient evaluation, therapeutic techniques, and effective communication with patients and healthcare teams.

RESP 2220 — Respiratory Care Foundations II
Typically Offered: Summer
Credits: 3
Lecture hours: 3
This course builds upon Respiratory Care Foundations I and explores advanced diagnostic techniques, pathophysiology, and pharmacotherapy. Develops critical thinking skills with a focus on making informed, evidence-based clinical decisions.
Prerequisites: RESP 1150

RESP 2230 — Critical Care I
Typically Offered: Summer
Credits: 3
Lecture hours: 3
Critical Care I focuses on the principles of noninvasive ventilation, mechanical ventilation, and airway management in critically ill patients. It includes modes of ventilation, patient-ventilator interaction, troubleshooting ventilators, and basic waveform monitoring/analysis. The course also explores airway management techniques, including intubation and tracheostomy care, in emergency, critical care, and long-term care settings.
Prerequisites: RESP 1150
Corequisites: RESP 2235

RESP 2235 — Critical Care I Lab
Typically Offered: Summer
Credits: 1
Lab hours: 3
Critical Care I Lab engages students in hands-on practice and practical application of mechanical ventilation, airway management, and patient monitoring techniques for critically ill patients in lab and simulation settings.
Prerequisites: RESP 1305
Corequisites: RESP 2230

RESP 2260 — Neonatal & Pediatric Respiratory & Critical Care
Typically Offered: Fall
Credits: 4
Lecture hours: 4
This course focuses on the respiratory care of perinatal and pediatric patients, emphasizing the unique anatomical and physiological differences in this population. It includes the study of fetal anatomy and physiology, neonatal resuscitation, management of congenital and pediatric respiratory diseases, and neonatal and pediatric mechanical ventilation.
Prerequisites: RESP 2220
Corequisites: RESP 2265

RESP 2265 — Neonatal & Pediatric Respiratory & Critical Care Lab
Typically Offered: Fall
Credits: 1
Lab hours: 3
Neonatal & Pediatric Respiratory & Critical Care Lab complements the theoretical framework established in the Perinatal & Pediatric Respiratory & Critical Care course. Engages students in practical to develop skills in assessing and managing the unique respiratory needs of perinatal and pediatric patients. Emphasizes neonatal resuscitation techniques, management of neonatal and pediatric respiratory disorders, and mechanical ventilation strategies. Includes certification in Pediatric Advanced Life Support (PALS) and Neonatal Resuscitation Program (NRP).
Prerequisites: RESP 2725
Corequisites: RESP 2260

RESP 2280 — Specialty Practice in Respiratory Care
Typically Offered: Summer
Credits: 2
Lecture hours: 2
Specialty Practice in Respiratory Care explores specialized areas of respiratory care, including durable medical equipment (DME), long-term acute care (LTAC), pulmonary rehabilitation, flight medicine, hyperbaric medicine, and sleep medicine. It teaches the unique respiratory care needs in these diverse settings and emphasizes the role of respiratory therapists in multidisciplinary teams, providing comprehensive care across various healthcare environments.
Prerequisites: RESP 1150

RESP 2320 — Critical Care II
Typically Offered: Fall
Credits: 3
Lecture hours: 3
This course builds on the knowledge from Critical Care I, focusing on advanced mechanical ventilation strategies and comprehensive adult critical care. It teaches advanced topics such as arterial line insertion, hemodynamic monitoring, and critical care pharmacology. The course emphasizes managing complex patients and implementing evidence-based critical care practices.
Prerequisites: RESP 2230
Corequisites: RESP 2325

RESP 2325 — Critical Care Lab II
Credits: 1
Lab hours: 3
This lab course provides students with hands-on and simulation experiences to complement the theoretical knowledge gained in Critical Care II. Focuses on advanced mechanical ventilation techniques, patient monitoring, and the implementation of critical care pharmacology.
Prerequisites: RESP 2235
Corequisites: RESP 2320

RESP 2330 — Respiratory Care Seminar
Typically Offered: Spring
Credits: 3
Lecture hours: 3
Respiratory Care Seminar prepares students for professional certification exams and the job market. Includes a comprehensive review and test preparation for the NBRC exams, resume building, and interview techniques.
Prerequisites: RESP 2320

RESP 2610 — Critical Care III
Typically Offered: Spring
Credits: 3
Lecture hours: 3
This course builds upon the knowledge and skills gained in Critical Care II, focusing on comprehensive patient assessment, advanced mechanical ventilation strategies, and specialized care for critically ill patients. Integrates advanced respiratory care concepts into complex clinical scenarios, including the management of high-acuity patients across the lifespan. Emphasizes critical thinking and problem-solving.
Prerequisites: RESP 2320

RESP 2615 — Critical Care Simulation
Typically Offered: Spring
Credits: 1
Lecture hours: 3
Critical Care Simulation provides an immersive, hands-on learning experience in critical care through low and high-fidelity simulation integrated with the principles of evidence-based medicine. Applies knowledge of mechanical ventilation, airway management, and advanced respiratory care in simulated ICU settings. Emphasizes clinical decision-making, teamwork, and crisis management skills under realistic, high-pressure conditions.
Prerequisites: RESP 2325

RESP 2725 — Clinical Rotation II
Typically Offered: Summer
Credits: 5
Lecture hours: 5
Clinical Rotation II provides students with hands-on clinical experience as they rotate through general respiratory and intensive care units, gaining practical skills in patient management. Includes diagnostic and therapeutic techniques, mechanical ventilation, and specialty rotations.
Prerequisites: RESP 1705

RESP 2745 — Clinical Rotation III
Typically Offered: Fall
Credits: 5
Lecture hours: 5
Clinical Rotation III focuses on intensive care units (ICU) and long-term acute care rotations, where students will gain hands-on experience in critical respiratory care. It emphasizes ventilator management, weaning protocols, and the care of intubated and trached patients in the adult, pediatric, and neonatal settings.
Prerequisites: RESP 2725

RESP 2775 — Clinical Rotation IV
Typically Offered: Spring
Credits: 5
Lecture hours: 5
This course provides students with another opportunity to rotate through neonatal and pediatric intensive care units (NICU/PICU) as well as adult ICUs. Students will learn to manage critically ill patients, including premature infants and children with complex respiratory disorders, while applying advanced ventilator strategies and patient-centered care techniques.
Prerequisites: RESP 2745