
RESPIRATORY THERAPY

RET 1005, Management of Cardiopulmonary Microbiology and Disorders Management of Cardiopulmonary Microbiology and Disorders

3 hrs., 3 crs.,

(Offered fall). This course introduces the student to microbiology as it relates to the profession of respiratory therapy. Topics may include but are not limited to: scope of microbiology, bacteria, viruses, physical and chemical methods of control, laboratory techniques, safety issues, and infections and disorders encountered in respiratory care.

RET 1024, Respiratory Care I Respiratory Care I

3 hrs., 3 crs.,

(Offered fall). Prerequisite: Program acceptance. Corequisite: *RET1024L, *RET1832. This course introduces the student to patient assessment and vital signs, principles of infection prevention and control, bedside monitoring of patients with cardiopulmonary disorders, lung expansion therapy and airway clearance, devices used to deliver medical gas therapy, and the manufacturing, storage, handling, and transportation of medical gases.

RET 1024L, Respiratory Therapy I Lab Respiratory Therapy I Lab

4 hrs., 2 crs.,

\$662.00 lab fee. (Offered fall). Corequisite: *RET1024, *RET1832. Through practice and performance testing, the student will demonstrate mastery in patient assessment and vital signs, principles of infection prevention and control, bedside monitoring, lung expansion and airway clearance, and delivery of medical gas therapy. Simulations will be utilized to enhance the learning experience and achieve course objectives while applying procedural knowledge gained in RET1024.

RET 1264, Respiratory Care II Respiratory Care II

3 hrs., 3 crs.,

(Offered spring). Prerequisites: *RET1024, *RET1024L, *RET1832. Corequisites: RET1264L, RET1833. This course includes the theory, procedures, and equipment used to deliver respiratory therapy medications. The student will be introduced to blood gas analysis, airway care, and basic life support.

RET 1264L, Respiratory Care II Lab Respiratory Care II Lab

4 hrs., 2 crs.,

\$287.00 lab fee. (Offered spring). Prerequisites: *RET1024, *RET1024L, *RET1832. Corequisites: RET1264, RET1833. Through practice and performance testing, the student will demonstrate the mastery of equipment used to deliver respiratory therapy medications, airway care, basic life support, and arterial blood gas analysis. Simulations will be utilized to enhance the learning experience and achieve course objectives while applying procedural knowledge gained in RET1264.

RET 1400, Cardiopulmonary Procedures Cardiopulmonary Procedures

3 hrs., 3 crs.,

(Offered spring). This course introduces the student to the fundamental concepts of hemodynamic monitoring, interventional pulmonary procedures, pulmonary function testing, and related pharmacologic agents.

RET 1483, Cardiopulmonary Assessment Cardiopulmonary Assessment

3 hrs., 3 crs.,

(Offered spring). This course introduces the student to basic assessment of patients with cardiopulmonary disorders. Topics may include but are not limited to: patient relationship, vital signs, dyspnea, cough and phlegm, chest inspection and palpation, percussion and breath sounds, chemistry, gram stains, and cultures, cardiac function, hematology, liver failure, and diagnostic radiological studies of the lungs.

RET 1485, Cardiopulmonary Anatomy and Physiology Cardiopulmonary Anatomy and Physiology

3 hrs., 3 crs.,

(Offered fall). This course includes the anatomy and physiology of the cardiopulmonary system incorporating ventilatory mechanics, gas transport, gas laws, acid base physiology, neural/chemical regulation of breathing, and ventilation perfusion relationships with regard to respiratory care.

RET 1832, Respiratory Care Clinical I Respiratory Care Clinical I**4 hrs., 1 cr.,**

(Offered fall). Corequisites: *RET1024, *RET1024L. This clinical course requires the student to apply theory and procedural knowledge gained from RET1024 and RET1024L to the patient care setting. Emphasis will include patient assessment and vital signs, principles of infection prevention and control, bedside monitoring, lung expansion and airway clearance, and delivery of medical gas therapy.

RET 1833, Respiratory Care Clinical II Respiratory Care Clinical II**8.533 hrs., 2 crs.,**

(Offered spring). Prerequisites: *RET1024, *RET1024L. Corequisites: RET1264, RET1264L/1272L. This clinical course requires the student to apply theory and procedural knowledge gained from RET1264 and RET1264L to the patient care setting. Emphasis will include inhaled medication delivery, hyperinflation therapy, and bronchial hygiene therapy.

RET 1934, Selected Topics Seminar Selected Topics Seminar**1 hr., 1 cr.,**

\$16.00 lab fee. (Offered summer). Advanced Cardiovascular Life Support (ACLS). This course builds on the foundation of lifesaving BLS skills, emphasizing the importance of preventing cardiac arrest, early and continuous high-quality CPR, and high-performing teams resulting in the attainment of the Advance Cardiovascular Life Support (ACLS) certification. Science and education from the most current American Heart Association Guidelines for CPR and Emergency Cardiovascular Care will be utilized.

RET 1935, Selected Topics Seminar VI Selected Topics Seminar VI**1 hr., 1 cr.,**

(Offered summer). This course will cover the theory, procedures, and selected clinical practice of pulmonary function testing.

RET 2007, Cardiopulmonary Pharmacology Cardiopulmonary Pharmacology**3 hrs., 3 crs.,**

(Offered fall). Prerequisite: RET1350. This course extends the study of pulmonary pharmacology to include anti-microbial agents, nicotine replacement therapy, neonatal and pediatric drug therapy, critical care medications and drugs to support the failing cardiovascular system.

RET 2280, Respiratory Care IV Respiratory Care IV**3 hrs., 3 crs.,**

(Offered fall). Prerequisites: *RET2878, *RET2878L, *RET2834. Corequisites: RET2280L, RET2835. This course will focus on the thorough review of mechanical ventilation with emphasis on adult applications. Included is etiology of respiratory failure, methods of providing positive pressure ventilation, prescribing machine settings and managing patient ventilator interactions, monitoring hemodynamics and gas exchange, weaning/extubation techniques and advanced modes of mechanical ventilation.

RET 2280L, Respiratory Care IV Lab Respiratory Care IV Lab**4 hrs., 2 crs.,**

\$384.00 lab fee. (Offered fall). Prerequisites: *RET2878, *RET2878L, *RET2834. Corequisites: RET2280, RET2835. Through practice and performance testing, the student will demonstrate mastery in the application of advanced modes of mechanical ventilation, ventilator graphics and waveforms, and specialty gases. Review of non-invasive ventilation, basic mechanical ventilation, and caring for critically ill patients are emphasized. Simulation will be utilized to enhance learning and achieve course objectives while applying procedural knowledge gained in RET2280.

RET 2714, Respiratory Care V Respiratory Care V**3 hrs., 3 crs.,**

(Offered spring). Prerequisites: *RET2835. Corequisites: RET2714L, RET2836. This course will focus on fetal growth and development, the examination and evaluation of labor, delivery, and physiological changes after birth, techniques of neonatal resuscitation and stabilization, techniques of Pediatric Advanced Life Support, assessment of the neonatal and pediatric patient, medications used in neonatal and pediatric respiratory therapy, neonatal and pediatric diseases, theories and concepts of neonatal and pediatric ventilatory support, grief and death and dying. Respiratory Care practices in the home care and long-term care settings will be explored and the NBRC Detailed Content Outline will be reviewed.

RET 2714L, Respiratory Therapy V Lab Respiratory Therapy V Lab**2 hrs., 2 crs.,**

\$400.00 lab fee. (Offered spring). Prerequisites: *RET2280, *RET2280L, *RET2835. Corequisites: RET2714, RET2836. Through practice and performance testing, the student will demonstrate mastery in mechanical ventilation techniques for newborn and pediatric patients resulting in the obtainment of the Neonatal Resuscitation Program (NRP) and Pediatric Advanced Life Support (PALS) certifications. Simulation will be utilized to enhance learning and achieve course objectives while applying procedural knowledge gained in RET2714.

RET 2834, Respiratory Care Clinical III Respiratory Care Clinical III**2 hrs., 2 crs.,**

(Offered summer). Prerequisites: *RET1264, *RET1264L, *RET1833. Corequisites: RET2878, RET2878L. This clinical course requires the student to apply theory and procedural knowledge gained from RET2878 and RET 2878L to the patient care setting. Emphasis will be on critical care procedures, continuous patient monitoring, introduction to mechanical ventilation, and review and interpretation of EKGs and ABGs.

RET 2835, Respiratory Care Clinical IV Respiratory Care Clinical IV**2 hrs., 2 crs.,**

(Offered fall). Prerequisites: *RET2878, *RET2878L. Corequisites: RET2280, RET2280L. This clinical course requires the student to apply theory and procedural knowledge gained from RET2280 and RET2280L to the patient care setting. Emphasis will be on advanced modes of mechanical ventilation, ventilator graphics and waveforms, and specialty medical gases.

RET 2836, Respiratory Care Clinical V Respiratory Care Clinical V**12.8 hrs., 3 crs.,**

(Offered spring). Prerequisites: *RET2280, *RET2280L, *RET2835. Corequisites: RET2714, RET2714L. This clinical course requires the student to apply theory and procedural knowledge gained from RET2714 and RET2714L to the patient care setting. Emphasis will be on neonatal and pediatric respiratory care.

RET 2878, Respiratory Care III Respiratory Care III**3 hrs., 3 crs.,**

(Offered summer). Prerequisites: *RET1264, *RET1264L, *RET1833. Corequisites: RET2878L, RET2834. This course is an introduction to critical care and thinking. Noninvasive ventilation, basic mechanical ventilation, airway care, intubation, and arterial blood gas sampling theory will be of primary focus.

RET 2878L, Respiratory Care III Lab Respiratory Care III Lab**2 hrs., 2 crs.,**

\$339.00 lab fee (Offered summer). Prerequisites: *RET1264, *RET1264L, *RET1833. Corequisites: RET2878, RET2834. Through practice and performance testing, the student will demonstrate mastery in continuous patient monitoring, mechanical ventilation, airway management, intubation, suctioning, O₂ therapy, EKG's, and ABG's. Simulation will be utilized to enhance learning and achieve course objectives while applying procedural knowledge gained in RET2878 and RET2878L.
