

Respiratory Care

- RESP 101 Fundamentals of Respiratory Care I 7 credits**
This course consists of an examination of the basic concepts and evidence of medical care and the role of the respiratory care practitioner as a member of the medical team. Emphasis is placed on career identity, evidence-based practice, professional responsibilities, and qualifications of a respiratory care practitioner. Students study the metric system, gas laws, anatomy and physiology of the respiratory system, medical gases, oxygenation, aerosol and oxygen therapy, hand resuscitators, lung volumes, chronic and acute lung disease management, and equipment sterilization. The laboratory and the clinical components permit developmental study and the facilitation of pertinent nursing skills and reinforce that what is learned in class. Four lecture and one laboratory hours per week. Clinical: 12 hours. A grade of 75 (C) or higher is required for graduation. Students must attain a theory grade of 75 or higher and pass in clinical in order to continue in the program.
- RESP 102 Fundamentals of Respiratory Care II 7 credits**
This course introduces topics that include assessment and therapeutic procedures focused on oxygenation, hypoxia, shunting, the dead-space unit, V/Q, airway management, methods of hyperinflation therapies, chest physical therapy, patient assessment, complete pulmonary function technology, electrolytes, and arterial blood gas interpretation. Emergency responses to events will also be studied. The laboratory and the clinical components offer the practical training to the topic areas. Four lecture and one laboratory hours per week. Clinical: 12 hours.
Prerequisite: RESP 101 Fundamentals of Respiratory Care I completed with a grade of 75 (C) or higher in the lecture component and a grade of pass in the clinical component.
- RESP 103 Fundamentals of Respiratory Care III 7 credits**
This course focuses on the respiratory care practitioner as critical care team member and team leader. Students learn to assess degrees of respiratory failure, mechanical ventilatory care, PEEP, CPAP, and weaning from the ventilator. Attempts are made to put the complications and benefits of ventilator therapy into proper perspective. Analysis of ventilators and graphics is studied. The students acquire an understanding of basic electrocardiogram interpretation and of non-invasive and invasive hemodynamic monitoring. Both acute and chronic illnesses are used as case bases. The laboratory and the clinical components offer practical application of the topic areas in the hospital intensive care units. Four lecture and one laboratory hours per week. Clinical: 12 hours.
Prerequisite: RESP 102 Fundamentals of Respiratory Care II completed with a grade of 75 (C) or higher in the lecture component and a grade of pass in the clinical component.
- RESP 104 Fundamentals of Respiratory Care IV 7 credits**
This course includes topics on neonatology, pediatrics, pulmonary rehabilitation, and home care, diagnostics, and therapeutic procedures. Quality assurance, health promotion and healthcare reimbursement are examined. Protocols in Respiratory Care are studied and practiced. Students also become familiar with the NBRC exam format by preparing for and taking self-assessment exams prepared and scored by the NBRC and by successfully completing five software Clinical Stimulation exams. Clinical experiences are provided to enhance the learning of these topics. Four lecture and one laboratory hours per week. Clinical: 12 hours.
Prerequisite: RESP 103 Fundamentals of Respiratory Care III completed with a grade of 75 (C) or higher in the lecture component and a grade of pass in the clinical component.
- RESP 111 Introduction to Pathology 2 credits**
Lectures and discussions focus on the basic principles of disease processes and their effect on the normal form and functions of the body. Acute and chronic disease management will be studied as well. This course is intended for respiratory therapy students.
Prerequisite: RESP 102 Fundamentals of Respiratory Care II. Co-requisite: RESP 103 Fundamentals of Respiratory Care III.
- RESP 112 Introduction to Pharmacology 2 credits**
Lectures and discussions focus on the study of drugs, especially those relating to respiratory therapy. Indication, contraindication, side effects, and dosages of drugs are studied. This course is intended for respiratory therapy students.
Prerequisite: RESP 101 Fundamentals of Respiratory Care I. Co-requisite: RESP 102 Fundamentals of Respiratory Care II.
- RESP 113 Respiratory Care Seminar I 2 credits**
This seminar course provides the student with the ability to select, review, obtain, and interpret data relevant to respiratory care cases. The student reviews existing clinical data and collect and recommend therapy. The student develops a respiratory care plan that is appropriate for the data collected.
Prerequisite: permission of instructor.
- RESP 115 Respiratory Care Equipment 2 credits**
This course explores the theoretical and practical application of respiratory care equipment. The student develops an understanding of the various pieces of equipment used in respiratory care. The equipment discussed is limited to oxygen equipment, aerosol equipment, pulmonary function equipment, and emergency resuscitating equipment.
Prerequisite: permission of instructor.

RESP 116 Respiratory Care Seminar II 3 credits
Focuses on the initiation and modification of respiratory care in the emergency setting. Specific topics include: Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), and Neonatal Resuscitation (NR). Protocols, algorithms, and evidenced-based practice guidelines will be used as the basis for study and practice.
Prerequisite: RESP 103 Fundamentals of Respiratory Care III.

RESP 117 Cardiopulmonary Diagnostics and Evaluation 1 credit
This course, which is intended for students in the Respiratory Care program, focuses on diagnostic testing with emphasis on critical care medicine. The integration of this assessment data into medical decision making is evaluated through the use of clinical simulations in a laboratory setting. One half-hour lecture and one laboratory hour per week.
Prerequisite: RESP 103 Fundamentals of Respiratory Care III.

RESP 121 Respiratory Care Clinical Cardio Anatomy and Physiology 3 credits
This course examines the cardiopulmonary system of the human body and its relationship to other organ systems. Topics of study include basic anatomy and physiology of the heart-lung systems, hemodynamic monitoring, and application of cardiopulmonary diagnostic indicators. An integrated approach will facilitate the examination of other body systems in order to promote the clinical application of respiratory care assessments and interventions. Models of study will span the human developmental cycle to include newborn, pediatric, and adult applications.
Prerequisite: RESP 102 Fundamentals of Respiratory Care II.

RESP 400 Special Study in Respiratory Care 1 credit
This course involves independent work on a selected topic under the direction of members of the Respiratory Care Department. Limited to two courses per student.
Prerequisite: approval of the Department Chair and Division Dean.