CARDIORESPIRATORY SCIENCE

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CRS 100 Intro to Resp Care & Procedure 4 Credits
Introduction to Respiratory Therapy is a study of the respiratory therapist's role as a member of the medical team. Gas laws, physics, physiology, medical equipment terminology are taught. In addition, it provides the student with an in-depth understanding of medical gas administration, humidity and aerosol therapy, safety systems, airway management and infection control. Students will also learn the mechanical devices utilized to maintain patent airways and the carious utilities in the treatment of respiratory and cardiac arrest Laboratory exercises provide students with an opportunity to develop skills. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 115 Clinical Practicum I 4 Credits
This course introduces the student to the hospital environment. The student studies the relationship of the respiratory care department with other medical departments in the hospital. The student learns charting, patient rounds, respiratory equipment modalities, medication administration, and bronchial hygiene therapy. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 116 Respiratory Pharmacology 3 Credits
This course introduces the students to the medications utilized in the treatment of patients with acute and chronic cardiopulmonary disorders. This course will also present a pharmacological basis of cardiorespiratory interventions. Additionally, integrate this knowledge with aerosol medication administration. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 123 Respiratory Care Assessment 3 Credits
This course covers essential information regarding common respiratory diseases. This course will also provide the student with a description of the anatomic alterations of the lungs, etiology of the disease process, an overview of the cardiopulmonary clinical manifestations associated with the disorder, and management of the respiratory system. In addition, the course is designed to provide students with the opportunity to develop informational gathering and decision-making skills in the diagnosis and treatment of patients with cardiopulmonary or related disorders. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 124 Adv Pract Resp Care and Proc 4 Credits
Advanced Practice Respiratory Care is a study of the respiratory therapist's role as a member of the critical care team. The course provides a continuation of knowledge and skills of respiratory care. Students will learn how to interpret arterial blood gas values and practice the arterial puncture/technique on a mannequin arm in the lab. The students will be introduced to critical care equipment, such as advanced artificial airways, machines that provide non-invasive ventilation and invasive ventilation. Procedures that involved assisting the physician for the therapeutic and diagnostic purposes is another topic in this course. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 125 Clinical Practicum II 4 Credits
This course provides the appropriate setting for the continuation of practicing and refining skills obtained throughout the course of the initial clinical experience. The student is provided the opportunity to administer medication through various types of therapy. They will also perform cardiopulmonary resuscitation, perform airway care and management, infection control procedures, patient assessments, apply non-invasive ventilation therapy, and evaluate and record pertinent data in the patient's chart. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 215 Clinical Practicum III 4 Credits
This course gives the student an opportunity to develop their clinical skills of airway management, cardiopulmonary resuscitation, aerosol therapy, arterial puncture and analysis, oxygen therapy, hyperinflation therapy and patient evaluation rounds. In addition, the student will begin learning basic mechanical ventilation concepts. Students will have exposure to the ICU's during this rotation. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 216 Continuity of Resp Care 3 Credits
This course will present cardiorespiratory care needs of the chronically ill, discharge planning, care management, patient education, alternative care sites, and home care. Psychological issues of geriatric acre are discussed. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 218 Resp Diagnostics and Lab 4 Credits
This course is designed to provide the students with practices in the art of patient assessment and an understanding of diagnostic and monitoring procedures. The course content includes the collection, analysis, and interpretation of various pulmonary, laboratory, and hemodynamic data. The collected data will then lead the student to consider possible therapeutic interventions and evaluation of patient treatment. Attention is given to those fundamental physiological concepts that provide a foundation for discussion of cardiopulmonary pathophysiology and common cardiopulmonary disorders. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 219 Neonate/Peds Resp Care and Lab 4 Credits
This course provides a comprehensive overview of pediatric and neonatal respiratory care. Special considerations of respiratory care practice unique to pediatrics and neonatology are discussed. Topics include pediatric anatomy and physiology, fetal development, clinical assessment, oxygen therapy, airway management, mechanical ventilation, resuscitation, cardiopulmonary pathophysiology and disorders specific to this specialty profession within respiratory care. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 223 Exam Seminar and Preparation 1 Credits
This course content comprises management principles/concepts; professional and regulatory agencies pertinent to RC practice; principles of healthcare reimbursement; best practice and patient safety, and personnel management/supervision. Cultural competency, clinical controversies and ethical issues, as well as standards of professional behavior will be discussed. The course includes intense preparation for passing the standardized National Board for Respiratory Care exams required to earn the CRT and RRT credentials. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.

CRS 225 Clinical Practicum IV 4 Credits
This course is designed to provide the respiratory care student with the opportunity to develop advanced skills in the management of ventilator patients in adult critical care areas. Students will also receive an introduction to the neonatal/pediatric intensive care units. In addition, rotations through specialty areas

are provided. Emphasis is placed on patient evaluation and education, decision-making skills, communication, and critical thinking skills. Prerequisite: Must be accepted in to the Cardiorespiratory Care Science program.