Course Descriptions

Respiratory Care

RESP 1114 Introduction to Respiratory Care Procedures
This course includes an introduction to basic respiratory care procedures including theory and clinical application. Areas that will be covered include oxygen administration, humidification, aerosol therapy and pharmacology, using the American Association of Respiratory Care guidelines and protocols. The course will explore the use and purpose in supportive treatment of the patient with pulmonary problems. Fundamentals of respiratory therapy will be covered including the atmospheric gases, gas laws, gas cylinders, regulating agencies, pressure reducing valves, flow meter, humidifiers, nebulizers and oxygen delivery devices. Applicable principles of physics will be discussed.

RESP 1121 Clinical Applications I
This course provides for experience in the clinical setting of hospitals and clinics, including both emergency and general floor care of respiratory procedures. This course will also include an introduction to the practical application of oxygen therapy, gas cylinders, humidity and aerosol therapy, assessment of vital signs and breath sounds, physical assessment of the patient, oxygen equipment and the cleaning and sterilization of equipment.

RESP 1133 Clinical Pharmacology
Pharmacology is the study of chemicals (drugs) and their interaction with the human body. This course includes indepth study of cardiopulmonary drug classes, their mechanism of action, indications for use, side effects, generic and trade names and their dosages.

RESP 1214 Respiratory Care Procedures II
This course is a continuation of Introduction to Respiratory Care Procedures with more advanced respiratory care procedures including theory and clinical applications using the American Association of Respiratory Care guidelines and protocols. This course is designed to teach the student practices and principles of oxygen therapy, IPPB, chest physiotherapy, cardiopulmonary resuscitation and related lifesaving maneuvers, basic ECG interpretation and airway management, including the use of various artificial airways.

RESP 1223 Clinical Applications II
Continuation of Clinical Applications I with increasing knowledge in the clinical setting and delivery of respiratory care with an increased scope of therapy delivered including oxygen therapy, IPPB, chest physiotherapy, cardiopulmonary resuscitation and related lifesaving maneuvers and airway management including the use of various artificial airways.

RESP 1232 Clinical Applications III
Continuation of Clinical Applications II with rotations to start orienting students to the intensive care unit. Emphasis will be placed on the student's ability to aid in the diagnosis, care and management of respiratory care patients.

RESP 1243 Pulmonary Pathology
The study of respiratory diseases, including signs and symptoms, etiology, pathophysiology, treatment and prognosis for both adult and pediatric patients. Emphasis will be placed on the several major treatment modalities associated with cardiopulmonary disease.

RESP 1253 Cardiopulmonary Anatomy and Physiology
The study of clinical medicine predicted on the basic sciences of anatomy and physiology, pharmacology and biochemistry. The therapist needs this knowledge to effectively tailor the care to fit the changing needs of the patient by evaluating the body in the disease state; also to understand the anatomy and physiology of the cardiopulmonary system as related to the interpretation of arterial blood gases and gas exchange. With this knowledge the practitioner can tailor the care of the patient's needs for ventilation and oxygenation.

RESP 2124 Advanced Clinical Applications I
Continuation of practical application of theories previously presented with emphasis on the care and management of the critical and mechanically ventilated respiratory care patient. Rotations will include the intensive care unit, heart catheterization lab, pulmonary rehabilitation and home care, physician clinic, polysomnography lab and a surgery rotation focusing on endotracheal intubation practice.

RESP 2224 Advanced Clinical Applications II
This clinical experience is designed to orientate the RCP to the environment of neonatal and pediatric

intensive care.

RESP 2232 Advanced Clinical Applications III

A continuation of critical care management, with a shift in the student's thinking from task-oriented perspective to patient-outcome perspective by emphasis on the development of clinical judgment. Clinical rotations will include adult ICU, pediatric ICU, neonatal ICU and an elective rotation through any specific area of interest.

RESP 2422 Pulmonary Diagnostics & Rehabilitation

This course will cover specialty equipment and problems of providing respiratory care in the home. In addition, the student will be given the opportunity to learn the definitions, essential components, organization and structure of a pulmonary rehabilitation program. This course will also include alternate settings in the emerging specialty areas for the advanced Respiratory Care Practitioner.

RESP 2445 Mechanical Ventilation

This course will teach the basics and parameters of continuous ventilation including special procedures. Students will also learn acid-base physiology as it applies to ventilator changes. Laboratory applications will include proficiency in ventilator classification and functions as well as ventilator setup and setting changes using the American Association of Respiratory Care guidelines and protocols.

RESP 2513 Introduction to Critical Care

This course is designed to take the entry-level technician to become an advanced Respiratory Care Practitioner. It will expand on critical care skills and the whys and why nots of Respiratory Care. The student will learn to select, collect, review and interpret clinical data including pulmonary function testing and cardiopulmonary exercise testing. The student will learn to evaluate appropriateness of prescribing therapy and participate in the development and delivery of the Respiratory Care Plan. Students will work on developing and using respiratory protocols where appropriate within hospital guidelines.

RESP 2613 Pediatric and Neonatal Respiratory Care

This course will provide the student with the opportunity to learn advanced skills and knowledge about neonatal and pediatric routine and critical respiratory care. The course will approach the subject as a separate portion of modern respiratory cares rather than a modification of adult care. The course will also separate pediatric and neonatal respiratory care modalities. The course contains information beginning with developmental and introductory concepts, then progresses through anatomical and physiological differences, equipment and therapeutic modalities, home care and developmental outcomes using the AARC guidelines and protocols. The goal of this course is to provide the entry-level practitioner with the knowledge, information and skills necessary to provide respiratory care to the pediatric and neonatal patient at the advanced practitioner level.

RESP 2621 Board Exam Review

This course is a review of the previous 24-month curriculum. The student will review the National Board of Respiratory Care (NBRC) entry-level examination content (CRT) and learn specific testing techniques needed to be successful during the first portion of this class. During the second portion of the class the student will review the NBRC advanced level examination content (RRT) and learn specific testing techniques needed to be successful.

RESP 2622 Professional Development of the Respiratory Care Practitioner

This course is designed to provide for the professional development of the respiratory care practitioner including topical studies of bio-ethics, workplace management, personal financial management, patient/family communication, physician interaction, resume development and job interviewing skills.