Course Information

Division: Health Sciences
Contact Hours: 9.0
Theory: 80
Lab Hours: 48
Off-Campus Clinical Hours: 12
Total Credits: 6.5

Prerequisites
Acceptance into the Respiratory Therapy program.

Co-requisites
RTH 102A – Pharmacology for Respiratory Therapists
RTH 104 – Cardiopulmonary Assessment
BIO 258 – Anatomy & Physiology II

Course Description
This classroom and laboratory course is an introduction to the duties and responsibilities of registered respiratory therapists. Topics covered include a review of physical science, cardiopulmonary anatomy and physiology, basic patient assessment skills, medical gas and aerosol administration, equipment processing, employee/patient safety, pulmonary medications, microbiology concepts, and an orientation to clinical sites.

This course is a required core course for students pursuing an Associate of Applied Science - Respiratory Therapy

Program Outcomes Addressed by this Course:
Upon successful completion of this course, students should be able to meet the program outcomes listed below:

A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.
C. Exhibit the personal behaviors consistent with professional standards and employer expectations of a competent Registered Respiratory Therapist.

Course Outcomes
In order to evidence success in this course, the students will be able to:

1. Define and use common medical terminology and abbreviations.
   Applies To Program Outcome
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

2. Identify basic anatomical structures of the cardiopulmonary system and relate their functionality to external and internal respiration.
   Applies To Program Outcome
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
3. Interpret arterial blood gas results including acid-base, ventilation, and oxygenation status, describe how the body regulates and compensates for these values, and solve for related equations.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

4. State the principles and laws describing properties of matter (including but not limited to: gas, fluids, pressure, volume, humidity, vapors, resistance, and flow), solve for associated equations, and relate these principles and laws to respiratory therapy equipment and patient application.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

5. Recognize the principles of operation, including indications, contraindications, safety features, and hazards of the most basic respiratory equipment (including but not limited to: stethoscopes, cylinders, regulators, flow meters, nebulizers, humidifiers, gas analyzers, blenders, bedside diagnostic equipment, and gas and aerosol administration devices), and demonstrate the proper selection, use, and/or handling of this equipment.
   **Applies To Program Outcomes**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

6. Identify basic microbiology classifications, morphology, and characteristics of commonly encountered organisms causing human morbidity/mortality in cardiopulmonary patients, differentiate associated testing and sterilization techniques, and demonstrate proper infection control.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.
   B. Demonstrate the ability to perform the clinical and technical skills relevant to his/her role as a Registered Respiratory Therapist.

7. Identify indications, contraindications, side effects, dosage amounts/types, and modes of actions of commonly administered bronchopulmonary medications.
   **Applies To Program Outcome**
   A. Demonstrate the ability to gather, comprehend, evaluate, apply, and problem solve using empirical information relevant to his/her role as a competent Registered Respiratory Therapist.

8. Demonstrate acceptable fluency in professional attitudes, ethics, and patient rights.
   **Applies To Program Outcome**
   C. Exhibit the personal behaviors consistent with professional standards and employer expectations of a competent Registered Respiratory Therapist.

Date Updated: 06/05/19
By: HMS