

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY RTH 111 – INTEGRATED SCIENCES FOR RESPIRATORY (3 CR.)

Course Description

Concentrates on the anatomy and physiology of the cardiopulmonary system. Lecture 3 hours per week.

General Course Purpose

This course is offered in the first semester of the program and is designed for beginning respiratory care students. The purpose of this course is to introduce fundamental principles of cardiopulmonary anatomy and physiology and medical terminology.

Course Prerequisites/Corequisites

Prerequisites: RTH 120, BIO 141 (NAS 161), BIO 142 (NAS 162) and HLT 141 or equivalent.

Course Objectives

Upon completing the course, the student will be able to:

- a) Apply basic medical terminology
- b) Illustrate anatomy and physiology of the airway
- c) Explain anatomy and physiology of the lungs
- d) Explain anatomy and physiology of the cardiovascular system
- e) Perform basic arterial blood gas interpretation

Major Topics to be Included

- Cardiopulmonary medical terminology
- Cardiopulmonary anatomy and physiology
- Cardiopulmonary assessment skills
 - Gas exchange
 - Gas transport
 - Arterial blood gas interpretation
- Acid base balance
- Pulmonary Function Tests and values