

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY RTH 135 – DIAGNOSTIC AND THERAPEUTIC PROCEDURES I (2 CR.)

Course Description

Focuses on purpose, use and evaluation of equipment and procedures used in the diagnosis and therapeutic management of patients with cardiopulmonary disease. Lecture 1 hour per week. Lab: 2 hours/week. Total 3 hours per week.

General Course Purpose

Presents theory and techniques used for assessing patients with cardiopulmonary disease on mechanical ventilators and introduces the students to protocols and procedures for adjusting mechanical ventilation to arterial blood gas parameters. Liberation from mechanical ventilation is explored. Technique for drawing of arterial blood gases is demonstrated in the laboratory setting. This course is offered in the third semester of the respiratory care program.

Course Prerequisites/Corequisites

Prerequisite: Successful completion of the first two semesters of RTH courses.

Course Objectives

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

- Explain and perform the correct procedure for obtaining arterial blood gases (ABGs), and recognize sample errors
- Explain the operation and maintenance of ABG analyzers and co-oximeters
- Perform, measure, and interpret pulmonary function studies
- High Flow Nasal Cannula
- CXR interpretation
- Therapist Driven Protocols
- Medical Gas (HE, NO)

Major Topics to be Included

- Monitoring the mechanically ventilated patient
- Liberation from mechanical ventilation
- Extubation
- ABG sampling and analysis
- Pulmonary Function Testing