

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY**  
**RTH 226 – THEORY OF NEONATAL AND PEDIATRIC RESPIRATORY CARE (2 CR.)**

**COURSE DESCRIPTION**

Focuses on cardiopulmonary physiology and pathology of the newborn and pediatric patient. Lecture 2 hours per week.

**GENERAL COURSE PURPOSE**

This course is offered in the fifth and final semester of the program. This course is designed as an overview of fetal and neonatal physiology as well as an introduction to neonatal pulmonary disease. This course will also familiarize the student with basic respiratory care techniques used with the compromised infant.

**ENTRY LEVEL COMPETENCIES**

The course prerequisite is all RTH coursework in the first two semesters of the program or permission of the program head.

**COURSE OBJECTIVES**

Upon completion of this course, the student will be able to:

- Describe normal fetal and neonatal development of the cardiopulmonary system
- Describe various methods of fetal, neonatal and pediatric patient assessment
- Describe the pathophysiology and treatment of congenital heart diseases
- Describe the pathophysiology and treatment of neonatal parenchymal diseases
- Describe the basic principles and techniques of ventilator management of the neonate and child

**MAJOR TOPICS TO BE INCLUDED**

- Overview of embryology
- Fetal and neonatal pulmonary structure and function
- Physical assessment
- Congenital abnormalities of the respiratory tract
- Cardiac abnormalities
- Pulmonary diseases
- Ventilatory management