

LABETTE COMMUNITY COLLEGE BRIEF SYLLABUS

SPECIAL NOTE:

This brief syllabus is not intended to be a legal contract. A full syllabus will be distributed to students at the first class session.

TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):

Please check with the LCC bookstore <http://www.labette.edu/bookstore> for the required texts for this class.

<u>COURSE NUMBER:</u>	RESP 113
<u>COURSE TITLE:</u>	PEDIATRIC RESPIRATORY CARE
<u>SEMESTER CREDIT HOUR:</u>	3
<u>DEPARTMENT:</u>	Respiratory Therapy
<u>DIVISION:</u>	Health Science
<u>PREREQUISITES:</u>	RESP 101 Fundamentals of Respiratory Care I RESP 107 Cardiopulmonary Anatomy & Physiology RESP 105 Respiratory Care Pharmacology

COURSE DESCRIPTION:

This course will cover neonatal and pediatric Respiratory Therapy. The course includes units on fetal development, neonatal and pediatric respiratory diseases, pharmacological agents, and Respiratory Therapy modalities applied to the neonatal and pediatric patient.

COURSE OUTCOMES AND COMPETENCIES:

Students who successfully complete this course will be able to:

1. Students who successfully complete this course will be able to differentiate for fetus, neonate, infant, child, and adult physiological functions and anatomical structures.
 - Define: Fetus, Neonate, Infant, Child, Adult
 - Understand fetal development of the respiratory and circulatory system and discuss the impact of abnormal development of the neonate
 - Describe the intrauterine structures and discuss the impact of abnormalities on fetus and neonate.
 - Provided appropriate information, evaluate the cardiopulmonary system of the fetus, neonate, infant, and child
 - Discuss impact of high risk pregnancy on the fetus and neonate
 - Understand abnormal labor and delivery and the impact of these on the fetus and neonate.

2. Students who successfully complete this course will be able to describe the role of the respiratory therapist in meeting specific metabolic needs of the neonate and infant.

- Discuss the importance of thermoregulation and respiratory care's responsibility in maintaining thermoneutrality for the neonate.
- Discuss the ways in which an infant loses water and respiratory care's responsibility maintaining appropriate fluid balance.
- Discuss the importance of glucose regulation and the impact to the respiratory system.
- Identify differences in pharmacokinetics in the perinatal/pediatric patient.

3. Students who successfully complete this course will be able to make decisions about and provide appropriate respiratory care for the neonate.

- Demonstrate ability to perform newborn resuscitation correctly
- Discuss the implications of newborn asphyxia on the viability of the neonate.
- Understand the transition of the cardiopulmonary system from fetus to neonate.
- Demonstrate ability to support fetus in transition to neonate.

4. Students who successfully complete this course will be able to determine appropriate management of the perinatal/pediatric patient with cardiopulmonary disease.

- Determine appropriate respiratory care treatment based upon patient signs and symptoms.
- Identify respiratory problems and potential respiratory problems based on collected data.
- Identify common respiratory problems associated with a specific disease state.
- Identify and justify standard of care for specific disease states.
- Discuss indications, hazards, and equipment needed for positive pressure ventilation.
- Recognize commonly used medications and their effects and uses.

5. Students who successfully complete this course will be able to determine presence of cardiopulmonary disease in the perinatal/pediatric patient through evaluation and collection of clinical data

- Recognize common clinical signs for cardiopulmonary disease.
- Recommend diagnostic modalities to gather additional clinical data to determine presence of pulmonary disease.
- Analyze specific laboratory data to determine presence of cardiopulmonary disease.
- Collect and evaluate pertinent clinical information gathered through patient assessment.
- Identify and discuss the uses, hazards, and maintenance of the following monitoring methods: Transcutaneous monitors, Pulse oximetry, Capnography, Umbilical artery catheter (UAC), Capillary Blood Gas (CBG), Arterial Blood Gas (ABG).

6. Students who successfully complete this course will be able to identify pathophysiology of a specific disease state and explain effects on the cardiopulmonary system.

- Explain the importance of surfactant in the lungs and factors that lead to decreased levels.
- Discuss the response of the fetus, neonate, infant, child to increased work of breathing.
- Interpret blood gas results and explain the relationship of disease states to blood gas changes.