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.

COURSE NUMBER:	RESP 203
COURSE TITLE:	FUNDAMENTALS OF RESPIRATORY CARE III
SEMESTER CREDIT HOURS:	3
DEPARTMENT:	Respiratory Therapy
DIVISION:	Health Science
PREREQUISITES:	Fundamentals of Respiratory Care I and II, Cardiopulmonary Anatomy and Physiology, Pharmacology, Clinical Practice I and II, Respiratory Diseases

COURSE DESCRIPTION:
This course will include an in-depth study of mechanical ventilation along with weaning procedures and the care of the critically ill patient.

COURSE OUTCOMES AND COMPETENCIES:
Students who successfully complete this class will be able to:

1. Determine the presence of respiratory failure based on evaluation of clinical data.
   - Differentiate between hypoxia, hypoxemia, respiratory failure, oxygenation failure, and ventilatory failure
   - Recognize common clinical signs of respiratory failure.
   - Recommend diagnostic modalities to gather additional clinical data to determine presence of respiratory failure.
   - Analyze specific laboratory data to determine presence of respiratory failure
   - Discuss causes and effects of hypoxia, hypoxemia, oxygenation failure, ventilatory failure, and respiratory failure.

2. Evaluate appropriateness of therapy for the patient in respiratory failure and to recommend modifications of therapy as needed.

- Interpret blood gas results and explain the relationship of patient's condition to blood gas changes.
- Recommend change in mode of ventilation as appropriate for each individual patient based on patient assessment and available clinical data.
- Recommend change in expiratory phase as appropriate for each individual patient based on patient assessment and available clinical data.
- Justify recommendations for care changes for the patient in respiratory failure.
- Appropriate mode of ventilation for each individual patient based on patient assessment and available clinical data.
- Appropriate expiratory phase for each individual patient based on patient assessment and available clinical data.

3. Explain the physiological effects of mechanical ventilation

- List indications, physiological consequences, hazards, and complications of mechanical ventilation
- Identify differences between negative and positive pressure ventilation
- Explain how pressure, volume, and flow are limited during inspiration and how they can alter volume or pressure delivery
- Using lung analog, predict changes in pressure and volume due to changes in compliance and resistance
- Contrast and compare pressure control ventilation to pressure support to volume ventilation.
- Discuss the physiological effects of inverse ratio ventilation.

4. Initiate, monitor, modify, and terminate mechanical ventilation as appropriate.

- Discuss ways of monitoring positive and negative effects of mechanical ventilation.
- Discuss approaches of providing mechanical ventilation to the patient including mechanism for determining most appropriate means.
- Identify appropriate initial settings for a given patient and circumstance
- Identify the patient who is not tolerating mechanical ventilation
- Identify ways to minimize negative effects of mechanical ventilation on the patient
- Provide a solution to a patient's physical or psychological comfort problem when given clues or signs to a situation
- List all physiological parameters and the normal, minimal, and critical values used to determine suitability for mechanical ventilation discontinuation.
- Determine most suitable means of weaning a patient and justify the method.