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 105

COURSE TITLE: RESPIRATORY CARE PHARMACOLOGY

SEMESTER CREDIT HOURS: 3

DEPARTMENT: Respiratory Therapy

DIVISON: Health Science

PREQUISITE: Admission to the Program

COURSE DESCRIPITION:
This course addresses general principles of pharmacology with emphasis on drugs affecting the cardiopulmonary system. An overview of antibiotics, narcotics and sedatives is presented.

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

1. Demonstrate an understanding of pharmacological principles.

- Utilize drug reference materials.
- Characterize and describe routes of administration of drugs.
- Describe the processes of drug absorption, distribution, metabolism, and elimination.
- Describe the systems used to name drugs.
- Identify components of a given prescription.

2. Recognize and recommend drug interventions specific to disease processes.

- Predict the action of a drug based on its classification as an autonomic nervous system drug.
- Recommend drug delivery mode based on patient's condition and age appropriateness.
- For a given patient or disease state, evaluate need for and response of respiratory drugs.
- For a given patient or disease state, evaluate need for and response of anti-infective therapy.
- For a given patient or disease state, evaluate need for and response of drugs that affect the cardiac system.
- Demonstrate understanding of the role of immune system in pulmonary disease.
- For a given patient or disease state, evaluate need for and response of neuromuscular, anesthetic, analgesic, and sedating drugs.

3. Recommend drug dosages and routes of administration suitable for a given patient or disease state.

- Characterize and describe routes of administration of drugs.
- Calculate strength of solutions in both percentage and ratio forms.
- Calculate drug dosage calculations based on age and size appropriateness.
- Upon evaluation of a patient, recommend appropriate route(s) of administration.

4. Demonstrate an understanding of the nervous system and the roles medication play in the altercation of this system.

- List the basic organization of the nervous system including histology and nerve impulse transmission.
- Classify a drug based on its action on the autonomic nervous system.
- Predict the action of a drug based on its classification as an autonomic nervous system drug.
- Predict the action of a drug based on its mechanism of interruption of normal nervous system stimulation.
- Given a neuromuscular, anesthetic, analgesic, or sedating drugs, predict response of the patient's neuromuscular system.

5. Demonstrate a comprehensive understanding of bronchodilator therapy.

- Describe the neurological control of bronchial smooth muscle including achievement of bronchodilation.
- List indications, contraindication, adverse reactions, onset of action, dosage range for each bronchodilator currently used.
- For a given patient or disease state, evaluate need for and response of bronchodilator therapy.