

## 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.

<b><u>COURSE NUMBER:</u></b>	RESP 101
<b><u>COURSE TITLE:</u></b>	FUNDAMENTALS OF RESPIRATORY CARE I
<b><u>SEMESTER CREDIT HOURS:</u></b>	3
<b><u>DEPARTMENT:</u></b>	Respiratory Therapy
<b><u>DIVISION:</u></b>	Health Science
<b><u>PREQUISITE:</u></b>	Admission to the Program

### **COURSE DESCRIPTION:**

This course provides instruction in basic gas physics and basic respiratory care. Included is a section on microbiology, patient assessment, and professionalism.

### **COURSE OUTCOMES AND COMPETENCIES:**

**Students who successfully complete this course will be able to:**

#### 1. Demonstrate an understanding of physics principles as they apply to Respiratory Care.

- Demonstrate ability to apply Venturi principle to respiratory care equipment.
- Demonstrate ability to apply Bernoulli principle to respiratory care equipment.
- Demonstrate ability to apply gas laws to respiratory care equipment.
- Demonstrate ability to apply gas laws in use and storage of compressed gases.
- Identify physics principles that directly affect patients.

#### 2. Demonstrate an ability to safely handle, use and store compressed gases.

- Recognize specific government entities and describe their role as they apply to compressed medical gases.
- Demonstrate ability to proficiently and safely use compressed gas cylinders.
- Demonstrate ability to monitor compressed gas systems.
- Demonstrate an understanding of bulk storage systems and distribution systems used for compressed gases.

3. Demonstrate an ability to deliver medical gas therapy safely, appropriately, and effectively.

- Describe the purpose and function of the various devices utilized in the administration of medical gases.
- Demonstrate an ability to select the appropriate gas administration device based on a clinical situation.
- Demonstrate an understanding of the types of hypoxemia and a basic understanding of oxygen delivery to the tissues.
- Demonstrate the ability to proficiently monitor patients receiving medical gas therapy.
- Demonstrate the knowledge of the indications, clinical applications, hazards, and complications of medical gas therapy.

4. Demonstrate an ability to deliver aerosol and humidity therapy safely, appropriately, and effectively.

- Describe the function of the various types of humidifiers and nebulizers used for administration of humidity and aerosol therapy.
- Demonstrate knowledge of the indications, clinical application, hazards, and complications of humidity and aerosol therapy.
- Describe the function of the equipment (SVN, MDI, DPI) used for the administration of aerosol drug therapy.
- Demonstrate an ability when given a clinical situation to correctly administer aerosol therapy.

5. Demonstrate an ability to deliver bronchopulmonary hygiene therapy safely, appropriately, and effectively.

- Develop an understanding of the clinical application of the types of bronchial hygiene therapy.
- Demonstrate an understanding of the indications, techniques of administration, and the hazards and complications of bronchial hygiene therapy.
- Demonstrate knowledge of the indications, clinical application, hazards, and complications of bronchial hygiene therapy.
- Demonstrate an ability when given a clinical situation to correctly administer bronchial hygiene therapy.

6. Identify and demonstrate patient assessment techniques.

- Recognize common clinical signs of cardiopulmonary disease.
- Recommend diagnostic modalities to gather additional clinical data to determine presence of pulmonary disease.
- Collect clinical information through patient assessment.
- Analyze specific clinical data to determine presence of cardiopulmonary disease.

7. Demonstrate proper documentation skills.

- Recognize the importance of proper documentation.
- Identify standards for documentation of patient records.
- Organize patient information in a systematic manner.
- Appropriately record the assessment information on the medical record.
- Discuss the type of records that should be maintained by a respiratory care department.

8. Exhibit communication skills appropriate for respiratory care practitioner.

- List importance of communication: written, verbal, non-verbal
- Identify sources of miscommunication.
- Given specific scenarios, discuss means of maximizing communication between individuals.