

**RCP 111**  
**THERAPEUTICS AND DIAGNOSTICS**

**COURSE DESCRIPTION:**

Prerequisites: 5 & 3      5 & 3      5 & 3      % , 2

Corequisites: 5 & 3      5 & 3

7 KLV FRXUVH SURYLGHV HPSKDVLV RQ WKHUDSHXWLFDQG  
DSSO\LQJ SUREOHP VROYLQJ VWUDWHJLHV LQ WKH SDWLHQ  
GHFLVLRQ PDNLQJ DQG SUFWLFLQJ SURHVVRQDO UHVSRQ  
FOLQLFDO SUFWLFH 8SRQ FRPSOHWLRQ VWXGHQWV VKRX  
UHVSLUDWRU\ WKHUDS\ FRQFHHSWV DQG SURFHGXUHV WKUR  
Course Hours Per Week: Class, 4. Lab, 3  
Semester Hours Credit: 5.

**LEARNING OUTCOMES:**

At the completion of the course requirements, the student should understand:

- I. Assessment of Respiratory disorders
- II. Basic therapeutics
- III. Patient education
- IV. Long-term care

**OUTLINE OF INSTRUCTION:**

- a. i. Electrolytes
- ii. Sputum
- iii. Gram staining
- b. Performing and interpreting electrocardiograms
  - i. Set up leads for a 12 lead ECG
  - ii. Recognize pertinent ECG patterns
  - iii. Discuss PQRST Complex and heart physiology
- c. Pulmonary function testing
  - i. Restrictive versus obstructive patterns
- d. Thoracic imaging
  - i. Chest radiograph
  - ii. Ultrasonography
  - iii. Computed tomography
  - iv. Magnetic resonance imaging
- e. Interpret and use an ABG in patient assessment
  - i. Analysis and monitoring of gas exchange
- f. Non-invasive monitoring
  - i. Pulse oximetry
  - ii. End-tidal CO<sub>2</sub>
- g. Point-of-care testing

- II. Basic therapeutics**
  - a. Airway management
    - i. Airway suctioning
    - ii. Obtaining a sputum sample for analysis
    - iii. Objectives and hazards of suctioning
    - iv. Usage and care of all artificial airways
    - v. Bronchoscopy
  - b. Lung expansion therapy
    - i. Concepts of hyperinflation
    - ii. Choosing the right modality
    - iii. Hazards and objectives of various modalities
  - c. Bronchial hygiene therapy
    - i. Choosing the right modality
    - ii. Hazards and objectives of various modalities
- III. Patient education**
  - a. Health promotion
- IV. Long-term care**
  - a. Concepts of cardiopulmonary rehabilitation
  - b. Home care
    - i. Oxygen administration
    - ii. Activities of daily living
    - iii. Equipment care
    - iv. Medicare requirements

#### REQUIRED TEXTBOOKS AND MATERIALS:

Textbooks to be selected by the instructor.

#### STATEMENT FOR STUDENTS WITH DISABILITIES:

6 W X G H Q W V Z K R U D H F T F X R L P U P H R O G E X M G W R B L V D Q \ S K \ V L F D O S V \ F K R O R G L V D E L O L W \ D U H H Q F R X U D J H G W R U H T X H V W D V V L V W D Q F H I I L U V W W & R F Z O H D W W / L N H Z L V H V W M G X I Q U W H V H Z P K H R U S I R Q V F H Q P W H L G D L O F G X H W R D Q \ F K U R Q L F K H D O W K F R Q G L W L R Q D U H H Q F R X U D J H V H U Y L F H V F R X Q V H O R Z U H H Z N W K Q Q W W K H & I R X Q Q W H O R E V F D Q E H F R R U E \ Y L V L W L Q J W K H 6 W X G H Q W ' H Y H O R S P H Q W 2 I I I 6 H U Y L F H V & H Q W H U U R R P