

RCP 115

C-P PATHOPHYSIOLOGY

COURSE DESCRIPTION:

Prerequisites: RCP 110, RCP 113, RCP 114, and BIO 168

Corequisites: RCP 111, RCP 123, RCP 144, and BIO 169

This course introduces the etiology, pathophysiology, clinical signs and symptoms, diagnoses, prognoses, complications, and management of cardiopulmonary diseases. Emphasis is placed on developing, evaluating, and modifying respiratory care plans based on evidence-based medicine protocols and clinical practice guidelines. Upon completion, students should be able to demonstrate competence in cardio-pulmonary disease concepts through written evaluations Course Hours Per Week: Class, 2. Semester Hours Credit: 2.

LEARNING OUTCOMES:

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

- I. Significance of a physical assessment procedure
- II. Chest radiograph
- III. How to record patient data and develop a patient treatment plan
- IV. Cardiopulmonary manifestations of obstructive airway disease
- V. Cardiopulmonary manifestations of infectious pulmonary diseases
- VI. Cardiopulmonary manifestations of pulmonary vascular diseases
- VII. Cardiopulmonary manifestations of pleural diseases and trauma
- VIII. Cardiopulmonary manifestations of environmental lung disease
- IX. Cardiopulmonary manifestations of neurologic disorders
- X. Cardiopulmonary manifestations of neoplastic disease
- XI. Cardiopulmonary manifestations of smoke inhalation, near drowning, atelectasis, and sleep apnea

OUTLINE OF INSTRUCTION:

- I. Significance of a physical assessment procedure
 - a. Non-invasive assessment techniques
 - b. Invasive assessment techniques
 - c. Commonly seen lab test
- II. Chest radiograph
 - a. Concepts of x-ray density
 - b. PA and AP films
 - c. Special techniques in the x-ray lab
- III. How to record patient data and develop a patient treatment plan
 - a. Patient interview
 - b. Obtaining subjective data
 - c. Obtaining objective data
 - d. SOAP development and follow-up
- IV. Cardiopulmonary manifestations of obstructive airway disease
 - a. Review of pertinent anatomy
 - b. Asthma
 - c. Bronchitis
 - d. Emphysema

- e. Other obstructive diseases
- V. Cardiopulmonary manifestations of infectious pulmonary diseases
 - a. Pneumonias
 - b. Tuberculosis
 - c. Other infectious pulmonary diseases
- VI. Cardiopulmonary manifestations of pulmonary vascular diseases
 - a. Pulmonary edema
 - b. Pulmonary embolism and infarction
- VII. Cardiopulmonary manifestations of pleural diseases and trauma
 - a. Flail chest
 - b. Pneumothorax
 - c. Pleural diseases
 - d. Kyphoscoliosis
 - e. Blunt chest trauma
- VIII. Cardiopulmonary manifestations of environmental lung disease
 - a. Pneumoconiosis
 - b. Organic lung irritants
- IX. Cardiopulmonary manifestations of neurologic disorders
 - a. Guillain Barre
 - b. Myasthenia gravis
 - c. Sleep apnea
- X. Cardiopulmonary manifestations of neoplastic disease
 - a. Anatomic alterations in the lung
 - b. General management of cancer
- XI. Cardiopulmonary manifestations of smoke inhalation, near drowning, and atelectasis
 - a. Smoke inhalation
 - b. Near drowning
 - c. Atelectasis

REQUIRED TEXTBOOKS AND MATERIALS:

Textbook to be selected by instructor.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 919-536-7208 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 10-209.