

RCP 115
C-P PATHOPHYSIOLOGY

COURSE DESCRIPTION:

Prerequisites: BIO 168 and BIO 169

Corequisites: None

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is on clinical signs and symptoms along with diagnoses, complications, prognoses, and management. Upon completion, students should be able to demonstrate competence in these 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 will be able to:

- a. Perform physical assessment procedures and understand their significance.
- b. Inspect a chest radiograph.
- c. Record patient data and develop a patient treatment plan.
- d. Describe cardiopulmonary manifestations of obstructive airway disease.
- e. Describe cardiopulmonary manifestations of infectious pulmonary diseases.
- f. Describe cardiopulmonary manifestations of pulmonary vascular diseases.
- g. Describe cardiopulmonary manifestations of pleural diseases and trauma.
- h. Describe cardiopulmonary manifestations of environmental lung disease.
- i. Describe cardiopulmonary manifestations of neurologic disorders.
- j. Describe cardiopulmonary manifestations of neoplastic disease
- k. Describe cardiopulmonary manifestations of smoke inhalation, near drowning, atelectasis, and sleep apnea.

OUTLINE OF INSTRUCTION:

- I. Physical assessment procedures
 - A. Non-invasive assessment techniques
 - B. Invasive assessment techniques
 - C. Commonly seen lab tests
- II. Chest radiograph
 - A. Concepts of x-ray density
 - B. PA and AP films
 - C. Special techniques in the x-ray lab
- III. Patient data and 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. Discuss cardiopulmonary manifestations of smoke inhalation, near drowning, atelectasis and sleep apnea.

- A. Smoke inhalation
- B. Near drowning
- C. Atelectasis
- D. Sleep apnea

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 686-3652 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1309.