RSPT 51C: PATIENT ASSESSMENT & PULMONARY DISEASE

Foothill College Course Outline of Record

Heading	Value
Units:	4
Hours:	4 lecture, 1.25 laboratory per week (63 total per quarter) Laboratory meets 5 times per quarter (3 hours per laboratory meeting).
Prerequisite:	BIOL 41.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- To differentiate the major respiratory disorders according to etiology, clinical signs and symptoms, and treatment approaches.
- Analyze physical exams and chest x-rays and relate the data to the patient's condition and anticipate problems which may occur.

Description

Physiological approach to the etiology, management, and prognosis of the various respiratory diseases. Utilization of physical examination, chest X-ray and basic clinical laboratory tests in the diagnosis and treatment of pulmonary disease. Intended for students in the Respiratory Therapy Program.

Course Objectives

The student will be able to:

- A. Classify pulmonary diseases into restrictive and obstructive categories.
- B. Analyze clinical laboratory test results and apply them to the patient's status.
- C. Explain which respiratory therapy modalities should be used to treat various pulmonary diseases.
- D. Differentiate the major respiratory infectious disorders according to etiology, clinical signs and symptoms, and treatment approaches.
- F. Identify the various clinical disorders associated with chest and pleural trauma, including their cause, clinical features, and management.
- G. Describe the anatomic alterations associated with chest wall disorders and what treatment options exist.
- H. Differentiate the differences between small cell and non-small cell carcinoma, their clinical manifestation and management.
- I. Describe neurologic disorders and sleep apnea.
- J. Describe the major postoperative respiratory complications and the mechanisms useful in preventing and treating these problems.

Course Content

A. Pulmonary diseases

- 1. Obstructive diseases
- a. COPD
- b. Asthma
- c. Bronchiectasis
- d. Cystic fibrosis
- 2. Restrictive diseases
- a. Pneumothorax
- b. Pleural effusion
- c. Flail chest
- d. Mucus plugging
- e. Pneumonia
- f. ARDS
- g. Lung abscess
- Н. ТВ
- I. Pulmonary edema
- J. Pneumoconiosis
- K. Fungal disease
- B. Clinical laboratory tests
- 1. Electrolyte studies
- 2. Hematologic studies
- 3. Coagulation studies
- 4. Chemistry studies
- C. Respiratory therapy modalities
- 1. Cough and deep breathing
- 2. Incentive spirometry
- 3. Lung expansion therapy
- 4. Aerosolized medication therapy
- 5. Bronchopulmonary hygiene therapy
- D. Infectious diseases
- 1. Pneumonia
- 2. Lung abscess
- 3. Tuberculosis
- 4. Fungal disease of the lung
- F. Chest and pleural trauma
- 1. Flail chest
- 2. Pneumothorax and hemothorax
- 3. Pulmonary contusion
- 4. Chest trauma
- G. Chest wall disorders
- 1. Scoliosis
- 2. Kyphosis
- 3. Kyphoscoliosis
- 4. Pectus carinatum
- 5. Pectus excavatum
- H. Lung cancer
- 1. Small cell carcinoma
- 2. Non-small cell carcinoma
- a. Adenocarcinoma
- b. Squamous cell carcinoma
- c. Large cell carcinoma
- I. Neurologic disorders and sleep apnea
- 1. Guillain-Barre syndrome
- 2. Myasthenia gravis
- 3. Sleep apnea
- J. Postoperative atelectasis

Lab Content

A. Classify pulmonary diseases into restrictive and obstructive categories

- 1. Perform chest exams and evaluate results
- B. Analyze CXRs

- 1. Identify anatomical landmarks
- 2. Distinguish between normal and abnormal films
- C. Analyze clinical laboratory test results and apply them to the patient's status
- 1. Include in SOAP charting
- D. Identify normal laboratory test results, and anticipate patient problems which may occur
- 1. Include in SOAP charting
- E. Explain which respiratory therapy modalities should be used to treat various pulmonary diseases
- 1. Include and integrate into SOAP charting
- F. Differentiate the major respiratory infectious disorders according to etiology, clinical signs and symptoms, and treatment approaches
- 1. Incorporate into charting as a care plan
- G. Identify the commonality and differences between the various clinical disorders causing pulmonary restriction, including their cause, clinical features, and management
- H. Describe the major postoperative respiratory complications and the mechanisms useful in preventing and treating these problems
- I. Distinguish among the causes, diagnosis, and treatment of the various diseases responsible for pulmonary complications

Special Facilities and/or Equipment

A. X-ray viewing boxes and simulation mannequins.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Methods of evaluation may include:

- A. Quizzes
- B. Midterm
- C. Comprehensive final exam

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

A. Lecture demonstration on the various respiratory therapy diseases, their pathophysiology, etiology, presentation, treatment and management.

Representative Text(s) and Other Materials

Des Jardins and Burton. <u>Clinical Manifestations and Assessment of Respiratory Disease.</u> 7th ed. Chicago: Mosby, 2016. ISBN: 9780323244794

Kacmarek, Stoller, and Heuer. <u>Egan's Fundamentals of Respiratory Care.</u> 11th ed. St Louis, MO: Mosby Year Book, Inc., 2017. ISBN: 9780323341363

Hanning, Brenda. <u>51C Course Syllabus.</u> Hanning, Brenda. <u>51C Lab Manual.</u>

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Assigned reading from required textbooks and lab manual competencies relevant to course content. Reading assignments will average 20-40 pages per week.

Discipline(s)

Respiratory Technologies