# RSPT 63A: ADVANCED PATHOPHYSIOLOGY & PATIENT MANAGEMENT

## Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2022
Units:	3
Hours:	3 lecture per week (36 total per quarter)
Prerequisite:	RSPT 51C.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

# **Student Learning Outcomes**

- Describe and identify the pathophysiology related to the signs and symptoms of pulmonary disorders.
- · Select the appropriate treatment for various pulmonary disorders.

#### Description

The assessment and treatment of patients with cardiopulmonary disease. Structured to help build higher order critical thinking and problem solving skills. Through the use of case studies and clinical simulations students will place emphasis on information gathering and decision making for respiratory care patients. Helpful for NBRC Clinical Simulation Examination preparation. Intended for students in the Respiratory Therapy Program; enrollment is limited to students accepted in the program.

## **Course Objectives**

The student will be able to:

- 1. Describe and identify the pathophysiology related to the signs and symptoms of cardiopulmonary disorders.
- 2. Gather appropriate information in the assessment of the various pulmonary diseases.
- 3. Select the appropriate treatment for various pulmonary disorders.
- 4. Interpret arterial blood gases and evaluate the patient's need for treatment.
- 5. Identify the methods used to drain the pleural space and complications associated with those methods.
- 6. Practice ventilator waveforms and ventilator strategies.

#### **Course Content**

- 1. Cardiopulmonary disorders
  - a. Status asthmaticus and asthma guidelines
  - b. COPD guidelines
  - c. Pleural diseases
  - d. Pulmonary vascular disease

- e. Acute lung injury and ARDS
- f. Pulmonary edema
- g. MSOF
- h. Shock/sepsis
- i. Near drowning
- j. Smoke inhalation and burns
- k. Hypothermia
- 2. Physical assessment of the critically ill patient
  - a. ABGs
  - b. PFTs
  - c. Chest exam
  - d. CXR
  - e. Laboratory results
- 3. Treatment strategies
  - a. ARDSNet protocol
  - b. Ventilator management
  - c. Hemodynamic monitoring
  - d. Therapist driven protocols
- 4. Acid base balance
  - a. Permissive hypercapnea
- Chest tubes and chest tube drainage systems

   Types of chest trauma
  - b. Chest tubes
- 6. Ventilator waveforms and management strategies
  - a. Air trapping
  - b. Dyssynchrony

## Lab Content

Not applicable.

#### Special Facilities and/or Equipment

Multi-media classroom and access to online Canvas platform.

## Method(s) of Evaluation

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

Exams including midterm exam Patient case study assignment and presentation Comprehensive final exam

## Method(s) of Instruction

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

Lecture and discussion on advanced topics in respiratory therapy including diseases, protocol based care and management guidelines

#### **Representative Text(s) and Other Materials**

Des Jardins, T., and G. Burton. <u>Clinical Manifestations and Assessment of</u> <u>Respiratory Disease, 8th ed.</u>, 2019.

Kacmarek, Stoller, and Heuer. Egan's Fundamentals of Respiratory Care, <u>12th ed.</u> 2019.

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

- 1. Reading assignments related to course content
- 2. Reading assignments will vary from 20-60 pages a week
- 3. Students will also need to compile data on a patient and present a case study

# **Discipline(s)**

**Respiratory Technologies**