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AOTA Approved Provider #4023

**Course Title:** Cardiopulmonary 103 - 104

**Course Subtitle:** Cardiopulmonary Pathophysiology and Clinical Assessment of the Cardiopulmonary System

**Course Description:** Cardiopulmonary 103, Cardiopulmonary Pathophysiology, is a 2-part course designed for the beginning to intermediate clinician in need of a review or comprehensive introduction into the pathophysiology of the cardiopulmonary system. It is important for therapists to have a thorough understanding of cardiovascular and pulmonary conditions as these are among the leading cause of morbidity and mortality. This course will differentiate the pathophysiology related to the structure and function of obstructive vs. restrictive lung conditions. An extensive overview of pathophysiological features of various conditions including atherosclerosis, ischemic heart disease, coronary artery disease plus more will be reviewed. This course will highlight hypertension, diabetes mellitus, anemia and syncope. Cardiac dysfunction secondary to non-cardiac conditions will also be addressed.

Cardiopulmonary 104, Clinical Assessment of the Cardiopulmonary System, is a 2-part course designed for the beginning to intermediate clinician in need of a review or comprehensive introduction to the clinical assessment of the cardiopulmonary system. This course will focus on the necessary components needed to perform a thorough assessment and examination of the patient with a cardiopulmonary diagnosis. A comprehensive assessment is fundamental to creating and implementing an effective plan of treatment. This course will use case studies to highlight clinical application and examination skills.

**Target Audience:** OT/OTA

**Course Length:** 4 hours

**Course Author/Instructor:** Frownfelter, PT, DPT, MA CCS, RRT, FCCP and Dean, PhD, PT / Brown, MS, OTR/L, CHT

**Educational Level:** Introductory, Intermediate, Advanced

**Course Objectives:**

At the end of this course, participants will be able to:

- Discuss how smoking impacts the cardiovascular and pulmonary systems

- Describe how lung dysfunction leads to cardiac dysfunction
- Describe how cardiac dysfunction leads to lung dysfunction
- Differentiate obstructive from restrictive pulmonary pathology and the manifestations of each
- Name 5 factors that precipitate an asthma attack
- List 3 risk factors of coronary artery disease
- Describe the process of arteriosclerosis
- Discuss rheumatoid arthritis and its impact on specific organs
- Identify anatomic structures and key topographic landmarks of the chest
- Describe various chest wall configurations
- Differentiate peripheral and central cyanosis
- Differentiate normal bronchial breath sounds from abnormal bronchial breath sounds
- Identify various components of a chest examination
- List 2 causes of decreased breath sounds
- List the steps involved to auscultate lung sounds

### **Outline of Content:**

#### **Hour #1**

Introduction  
 Obstructive Lung Disease  
 Emphysema  
 Prognosis  
 Bronchiectasis  
 Restrictive Lung Disease  
 Eosinophilia  
 Sarcoidosis and RA

#### **Hour #2**

Coronary Artery Disease  
 Obstructive Sleep Apnea  
 Myocardial Infarction  
 Congestive Heart Failure  
 Compensated and Decompensated Heart Failure  
 Pulmonary Hypertension  
 Athletic Heart Syndrome  
 Summary

### **Hour #3**

Introduction  
History  
Physical Exam of the Chest  
Anatomic Landmarks  
Visual Inspection  
Chest Wall Configuration  
Breathing Patterns  
Auscultation

### **Hour #4**

Breath Sounds  
Heart Sounds  
Mediate Percussion  
Palpation  
Case Study #1  
Case Study #2  
Case Study #3  
Summary

#### **Instructional Methods and Formats:**

Online course available 24/7 at [www.OnlineCE.com](http://www.OnlineCE.com) includes PDF downloadable course. See course formats for additional details.

#### **Course Completion Requirements:**

A minimum passing score of 100% is required for course completion. You will have as many attempts as needed until your passing score of 100% is achieved. Upon successful completion of course, you will receive your certificate of completion and AOTA eligible CEUs.

#### **AOTA Classification Codes:**

Category 1: Domain of OT  
Category 2: Occupational Therapy Process  
Category 3: Professional Issues

#### **Additional Policies:**

OnlineCE Policies are available by clicking on the tab – Policies – located in the left hand navigation bar.

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