



Online Continuing Education Courses www.OnlineCE.com

AOTA Approved Provider #4023

Course Title: Diagnostic Imaging 101

Sub-Title: The Physics of Medical Imaging

**Source:** Diagnostic Imaging for Physical Therapists, 1st ed., by James Swain MPT, Kenneth W. Bush MPT Phd, Juliette Brosing PhD

<u>Source Description:</u> With the ever-increasing demand on physical therapists to develop the most effective treatment interventions comes this invaluable imaging resource covering exactly what you need to know! Diagnostic Imaging for Physical Therapists gives you the knowledge to understand the basic principles of musculoskeletal imaging and how to interpret radiographic images in your physical therapy practice. This straightforward, highly illustrated text is organized by body region and covers all the fundamentals with an emphasis on standard, two-dimensional x-rays. With this indispensable text, you'll recognize when diagnostic imaging is necessary, and you'll be able to interpret the results with confidence.

See course outline below for details and inclusive content in Diagnostic Imaging 101 course

**Source:** Diagnostic Imaging for Physical Therapists, 1st ed., by James Swain MPT, Kenneth W. Bush MPT Phd, Juliette Brosing PhD

Target Audience: OT/OTA and other healthcare professionals

Course Length: 2 hours

**Course Author/Instructor:** James Swain MPT, Kenneth W. Bush MPT Phd, Juliette Brosing PhD / Brown, MS, OTR/L, CHT

Educational Level: Introductory, Intermediate, Advanced

#### **Course Objectives:**

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

• Explain the basic science involving the production of x-rays, computed tomography scans, bone scans, and magnetic resonance imaging

- Discuss the advantages of having fundamental knowledge regarding how different imaging systems work
- Become familiar with the production of x-rays
- List the benefits of digital radiography
- Discuss the indications for x-ray vs. CT scan vs. bone scans vs, MRI
- Examine the basic physics of MRI
- Compare and contrast various imaging modalities
- Discuss clinical application and how being able to interpret radiographs can enhance your treatment

### **Outline of Content:**

### <u> Hour #1</u>

Introduction X-rays and CT Scans Production of X-rays Film/Screen Radiography Digital Radiography CT Scans Bone Scans Magnetic Resonance Imaging (MRI)

# <u>Hour #2</u>

Basic MRI Larmor Frequency Flips T1 and T2 Spin Echo Pulse Sequence Gradients Comparison of Various Imaging Modalities

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

Online course available 24/7 at 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: <u>Domain of OT</u> Category 2: <u>Occupational Therapy Process</u> 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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