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Course Title: Pain 204

**Sub-Title**: Neuroanatomy of the Nociceptive System and Neurophysiology of Pain

**Target Audience**: OT/OTA

**Course Length:** 3 hours

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Educational Level: Introductory, Intermediate, Advanced

The course is written at the intermediate level, but learners of all levels will benefit from the information.

# **Course Objectives:**

At the conclusion of the course, participants will be able to:

- Appreciate the different types of peripheral nociceptors and their associated axons
- Understand the pathways involved in transmitting nociceptive information within the nervous system
- Understand the organization of the dorsal horn and the termination patterns of afferent inputs
- Examine the areas of the nervous system involved in the perception, integration and response to nociception
- Become familiar with the neurophysiology underlying somatic and visceral pain
- Understand mechanisms of sensitization in the peripheral and central nervous system
- Describe ways in which the brain controls nociceptive processing
- Identify and describe brain structures involved in the perception of pain

## **Outline of Content:**

## Hour #1

Overview
Structure and function of peripheral nociceptors
Non-neuronal cells
Anatomy of referred pain
Dorsal root ganglion cells

# Hour #2

Primary afferents

The dorsal horn

Spinal cord transmission pathways

Trigeminal system

Sympathetic nervous system

Areas of the brain involved in the perception, integration and response to nociception Conclusion

## Hour #3

Overview

Nociception of somatic and visceral origin

Peripheral sensitization

Central sensitization

Descending inhibition and facilitation

Processing and control by higher centres

Conclusion

## **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: 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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