



Course Title: Kinesiology 102 - Kinesiology of the Elbow and Forearm

**Course Description**: Kinesiology 102, Kinesiology of the Elbow and Forearm, is a 2-hour course designed for the clinician interested in exploring the link between structure and function of the musculoskeletal system. This comprehensive, research-based course reveals the fundamental principles and kinesiology of the elbow and forearm before moving onto more complex material. Clinical concepts and connections to clinical application will also be emphasized. At the end of this course, the clinician will have a more thorough and confident understanding of kinesiology which is fundamental to designing safe and effective treatment plans.

Target Audience: OT / OTA and other healthcare professionals

Course Type: Video vs. Text-based

Educational Level: Beginner, Intermediate, Advanced

CE Hours: 2 contact hour / .2 ceu

Course Prerequisites: None

Course Author / Instructor: Neumann, PT, PhD, FAPTA / Brown, MS, OTR/L, CHT

## **Learning Objectives:**

- Discuss osteology and arthrology of the elbow and forearm
- Describe kinematics of the elbow joint and forearm
- Compare and contrast muscle and joint interactions
- Outline and describe the path of innervation of the brachial plexus
- Discuss sensory innervation of the joints
- Summarize muscle actions that act on the elbow
- Summarize muscle actions that act on the forearm

## Agenda:

## Hour #1

- OSTEOLOGY
- Mid-to-Distal Humerus
- Ulna
- Radius
- ARTHROLOGY
- Joints of the Elbow

- General Features of the Humero-Ulnar and Humeroradial Joints
- Periarticular Connective Tissue
- Kinematics
- Structure and Function of the Interosseous Membrane
- Joints of the Forearm
- General Features of the Proximal and Distal Radio-Ulnar Joints
- Joint Structure and Periarticular Connective Tissue
- Kinematics

# <u>Hour #2</u>

- MUSCLE AND JOINT INTERACTION
- Neuroanatomy Overview: Paths of the Musculocutaneous, Radial, Median, and Ulnar Nerves throughout the Elbow, Forearm, Wrist, and Hand
- Innervation of Muscles and Joints of the Elbow and Forearm
- Innervation of Muscle
- Sensory Innervation of Joints
- Function of the Elbow Muscles
- Elbow Flexors
- Elbow Extensors
- Function of the Supinator and Pronator Muscles
- Supinator Muscles
- Pronator Muscles
- SYNOPSIS
- ADDITIONAL CLINICAL CONNECTIONS

# **Course Completion Requirements:**

A 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 and completing a satisfaction survey, you will receive your certificate of completion.

# **Additional Course Information**

**Course Registration:** Register for Free at <u>www.OnlineCE.com</u>. Once registered, you can begin to purchase courses. Contact <u>info@onlinece.com</u> for special needs requests and assistance.

**Refund Policy:** There will be no refunds for courses taken at OnlineCE.com or monies deposited into My CE Bank. Any money on account will be used for taking future courses. If you start a course in error, or if you are dissatisfied with a course, please contact us in the first part of the course and we will void the course and you can select a replacement course.

**Cancellation Policy:** Only available courses are offered online and on-demand and available for purchase. No registration fees are collected for courses that are not provided on-demand. Due to the online and on demand format, courses are not cancelled.

**Course Date and Location:** This is an independent course that is available 24/7 on-demand at <u>www.OnlineCE.com</u>.

**Required Materials and Equipment:** Courses offered on OnlineCE.com can be accessed on any type of computer or device. No special software is required but we do recommend the use of the Chrome Browser (recommended, not required). All course materials are contained within the courses and no prerequisites are required.



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