



**Course Title:** Hand Therapy 101– Hand, Elbow and Shoulder: Core Knowledge in Orthopedics Course

**Course Description**: Hand Therapy 101 is a comprehensive course designed for the intermediate to advanced practitioner. This course provides a clear and concise approach to a broad range of disorders of the hand. Topics are clinically relevant and include Anatomy and physical examination of the hand, fractures and fracture management, carpal instabilities, flexor and extensor tendon injuries, various types of tenosynovitis conditions, compression neuropathy along with information on nerve physiology and repair, complex regional pain syndrome, amputations along with wound management and soft tissue coverage, infections, arthritis and more. This course includes key concepts and core knowledge that is up-to-date and easy to follow. A general overview of each condition is presented followed by additional information on the treatment and surgical management of each condition. The clinician working with patients with hand injuries must understand the current techniques used by surgeons in order to develop appropriate treatment and design interventions that are effective to restoring maximum hand function. This course includes 140 interactive, multiple-choice questions that are embedded within the material as part of the learning module and as a way to test learner knowledge related to learning objectives.

Target Audience: OT / OTA and other healthcare professionals

Course Type: Video vs. <u>Text-based</u>

Educational Level: Beginner, Intermediate, Advanced

CE Hours: 45 contact hour / 4.5 ceu

Course Prerequisites: None

Course Author / Instructor: Multiple / Brown, MS, OTR/L, CHT

### **Learning Objectives:**

- Describe normal anatomy of the hand which is fundamental to recognizing and treating pathology.
- List and examine 5 components involved in a comprehensive physical examination of the hand.
- Describe various types of phalangeal fractures and understand general principles of conservative and operative treatment interventions.
- Describe various types of metacarpal fractures and understand general principles of conservative and operative treatment interventions.
- Compare and contrast fractures of the thumb and how various fractures are treated.

- Become familiar with classification of thumb injuries and methods of thumb reconstruction.
- Summarize diagnostic techniques and management of distal radius fractures and outcome measures.
- Differentiate various surgical techniques used to stabilize fractures and how these techniques impact rehabilitation protocols.
- Examine and describe the distal radioulnar joint and triangular fibrocartilage complex and types of injuries that result in ulnar-sided wrist pain.
- Recognize the importance of carpal kinematics and the role of the scaphoid along with carpal anatomy and biomechanics.
- Become familiar with various aspects of scaphoid fractures and nonunion as well as current treatment options.
- Recognize the incidence and impact of all carpal bone fractures as well as carpal instabilities how they are diagnosed and treated both conservatively and surgically.
- Become familiar with diagnostic methods used to diagnosis carpal instabilities and understand each classification or category of carpal instability.
- Define flexor tendon zones, tendon nutrition and healing as well as repair techniques and treatment protocols.
- Define extensor tendon zones of injury, repair techniques and treatment protocols.
- Become familiar with a wide range of tendonitis conditions, differential diagnosis and treatment options.
- Review nerve anatomy and physiology and understand how nerve regenerate.
- Differentiate between various levels of nerve injury, predict outcome and understand classification of nerve injury.
- Outline and examine nerve compression syndromes and recognize common site of entrapment for peripheral nerves.
- Recognize signs and symptoms of complex regional pain syndrome as well as differentiate stages and symptoms of a more advanced condition.
- Become familiar with the basic tenants of tendon transfers as well as pre-operative evaluation of muscles and nerves commonly transferred to restore function after paralysis.
- Describe the pathoantomy and pathophysiology of Dupuytren's disease and list common surgical interventions and complications/outcomes.
- Describe various type of fingertip injuries including nail bed and fingertip amputations and understand options for soft tissue coverage and management.
- Understand the importance of a comprehensive history and physical exam with hand infections and list principles of treatment.

- Become familiar with specific anatomic infections and how infection can impair hand function.
- Familiarize yourself with key concepts in replantation as well as contraindications.
- Describ the pathophysiology of osteoarthritis on joints of the hand and wrist.
- Become familiar with surgical treatment options for osteoarthritis in the wrist and hand.
- Identify outcomes after surgical intervention for arthritic conditions of the hand and wrist.
- Differentiate rheumatoid arthritis (RA) including clinical features, pathophysiology and management of RA.
- Become familiar with the different operative techniques and surgical procedures often performed on patients with RA and indicate functional outcomes.
- Become familiar with soft tissue neoplasms (benign and malignant) and basic principles of tumor diagnostics, and various classifications. And stages of tumors.
- Become familiar with various bone tumors of the upper extremity.

## Agenda:

## **Outline of Chapters**

Anatomy and Physical Examination of the Hand Phalangeal Fractures and Dislocations Fractures and Dislocations Involving the Metacarpal Bone Fractures and Dislocations of the Thumb Thumb Reconstruction Distal Radius Fractures DRUJ, TFCC Injuries, and Ulnar Sided Wrist Pain **Scaphoid Fractures and Nonunions** Carpal Bone Fractures Excluding the Scaphoid **Carpal Instability Including Dislocations** Osteonecrosis of the Carpus Flexor Tendon Injuries Extensor Tendon Repair and Reconstruction Tenosynovitis: Trigger Finger, Dequervain's Syndrome, FCR and ECU Nerve Physiology and Repair Compression Neuropathy **Complex Regional Pain Syndrome** Tendon transfers for Peripheral Nerve Injuries Dupuytren's Disease Fingertip Injuries, Nailbed Injuries, and Amputations Soft-Tissue Coverage of the Hand Hand Infections Replantation Osteoarthritis of the Hand and Wrist Rheumatoid Arthritis-Hand and Wrist Skeletal Reconstruction Rheumatoid Arthritis-Hand and Wrist-Soft Tissue Reconstruction

Soft Tissue Neoplasm: Benign and Malignant Bone Tumors: Benign and Malignant

## **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 info@onlinece.com for special needs requests and assistance.

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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 www.OnlineCE.com.

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.



Occupational Therapy

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