

**Medical Exercise Therapy: Level 4 – Wrist and Hand
8 Contact Hours****Objectives**

The main objective of Level 4: M.E.T. – Hand and Wrist is to provide clinicians with the skillset to implement dosing, design and implementation strategies for the hand and wrist related therapeutic exercises. The course will help the clinician to perform a functional assessment and be able to design therapeutic exercises based on the functional biomechanics of the hand and wrist. Special attention is paid to functional integration of wrist and hand therapeutic exercises using the “Local - Semi-global - Global *MET*hology approach.

With a balanced mix of lecture and lab practice, this course enables clinicians to immediately implement therapeutic exercises with high specificity of dose, design and delivery for the hand and wrist.

Upon completion of this course the student will:

- Direct therapeutic exercise design and dosing based on the knowledge of demographics, prevalence, prognosis of hand and wrist pathology, impairment and dysfunction.
- Direct therapeutic exercise design and dosing based on the knowledge of wrist and hand functional biomechanics.
- Recognize the components of therapeutic exercise prescription for the wrist and hand.
- Operate dynamometry to facilitate the Clinical Fatigue Test for wrist and hand related therapeutic exercises.
- Execute a Clinical Fatigue Test for wrist and hand related therapeutic exercises.
- Formulate an exercise prescription with high specificity.
- Dose therapeutic exercises utilizing different resistance equipment.
- Dose therapeutic exercises for strength, strength/endurance, endurance, power, symptom reduction, mobilization and stabilization.

Recommended Pre – Course Reading

- Altman E. The ulnar side of the wrist: Clinically relevant anatomy and biomechanics. J Hand Ther. 2016 Apr-Jun;29(2):111-22.
- Berger RA. The anatomy and basic biomechanics of the wrist joint. J Hand Ther. 1996 Apr-Jun;9(2):84-93.
- Valdes K, von der Heyde R. An exercise program for carpometacarpal osteoarthritis based on biomechanical principles. J Hand Ther. 2012 Jul-Sep;25(3):251-62.

Course Outline

All modules are a combination of lecture and lab

Day 1

08.00 AM	Registration
08.15AM	The M.E.T. METH odology: Dosing – Design - Delivery
08.30 AM	Case Studies
09.30 AM	Biomechanics of the Wrist and Hand: Considerations for Therapeutic Exercise Design
10.30 AM	Break
10.45 PM	Symptom Reduction Exercises for the Wrist and Hand
11.15 PM	Mobilization Exercises for the Wrist and Hand: Manual Therapy Alignment, Design and Dosing
12.45 PM	Lunch
01.30 PM	Stabilization and Functional Integration: Therapeutic Exercise design considerations
02.30 PM	Strength Exercises for the Wrist and Hand
03.30 PM	Break
03.45 PM	Strength Exercises for the Wrist and Hand - Continued
04.30 PM	Case-studies and Theoretical Post – Course Interaction
05.30PM	Adjourn