

# **IKN Approach Level 1 Online**

## **Pre-Course**

- Research articles
- Recommended reading
- Receive the powerpoint

## Week 1: Neurological Applications & Musculoskeletal Care

- Key neuromechanical principles that govern movement control
- Neurology of disturbed vs undisturbed movement
- Neurology of pain & other protective mechanisms
- Cortical & cerebellar coupling and how it influences distal vs proximal control

## Week 2: Assessment & Rehabilitation Principles

- The importance of assessing segmental interactions
- Proximal vs distal assessment clustering
- Creating a neuromechanical clinical reasoning framework
- Neurological, muscular, joint, and attentional features of the midline & limb structures

#### Week 3: Lower Limb Assessment

- Proximal and distal neuromechanical couplings of the lower limb structure
- Key proximal & distal practical assessment strategies
- How to use objective assessment findings to guide your rehabilitation plan
- Case study scenarios

#### Week 4: Lower Limb Rehabilitation

- Identify the key global & local capacities of the lower limb
- Practical rehab/training strategies to restore distal to proximal load sharing qualities
- How to sequence your loading strategies with common musculoskeletal conditions
- Case study scenarios





## Week 5: Upper Limb Assessment

- Proximal and distal neuromechanical couplings of the upper limb structure
- Key proximal & distal practical assessment strategies
- How to use objective assessment findings to guide your rehabilitation plan
- Case study scenarios

#### Week 6: Upper Limb Rehabilitation

- Identify the key global & local capacities of the upper limb
- Practical rehab/training strategies to restore distal to proximal load sharing qualities
- How to sequence your loading strategies with common musculoskeletal conditions
- Case study scenarios

## Week 7: Midline Assessment & Rehabilitation

- Establish key neuromechanical behaviours of the midline
- Practical assessment strategies to identify current load sharing capacities
- Practical rehabilitation/training strategies to restore midline capacities
- Case study scenarios

#### Week 8: Head & Neck Systems

- Vestibular, visual, and TMJ neuromechanical behaviours
- Practical assessment strategies of the head and neck systems
- Identify how the contribute to midline load sharing capacities
- Case study scenarios

