Course Title: Core Stability 201

Course Subtitle: Foundation, Form and Function: Concepts of Trunk stability for Optimal Function and Motion

Course Description: Core stability is the new lucrative trend in the Rehab and Sports Industry but what is the actual core according to the new evidence? What are the anatomical integrations of muscle, fascia, neural and the emotional components that are involved in efficient trunk stability? Why are our patients tight, stiff or collapsing? Why are so many of our athletes in significant dysfunction? This seminar is heavily evidence based on multiple theories on the core and the overriding affects of the global muscle groups, the latest studies on respiration and the diaphragm and its far-ranging effects on the trunk. Dysfunction of the respiratory complex, trunk muscular imbalances, muscular inhibition and weakness, myofascial restrictions, all have significant effects on posture and trunk stability.

Multiple lab videos in this seminar will deal with muscle length evaluations, core evaluation, respiratory facilitaton and a functional core training program that can be utilized with heavily involved patients right up to and including performance athletes. This seminar will enable the student to connect the negative effects of dysfunction of the diaphragm and the dysfunctional core to specific pathologies and generate answers on the management of these pathologies.

Target Audience: PT/PTAs and other healthcare professionals

Course Length: 4 hours

Course Author/Instructor: Debra Dent, BPT, Dip Manip PT, OCS, FCAMPT

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 end of the course, participants will be able to:

Hour 1 and 2

- Describe the components of the core and the function of the core.
- Describe the function of the diaphragm as it relates to posture, muscular relationships and stability of the spine.

- Describe the function and structure of the superficial muscle system of the body.
- Describe two concepts of spinal stability.

Hour 3

- Demonstrate how to determine the length of quadratus lumborum and erector spinae.
- Demonstrate how to evaluate Transversus abdominus function
- Demonstrate how to facilitate the core and initiate a core training program

Hour 4

- List three pathologies related to less than optimal core function.
- Describe three postural strategies that the patient may develop when the core is in dysfunction.
- Describe how weakness of the abdominals can alter diaphragm contractions.
- Explain how respiratory fatigue can alter core control.

Outline of Content:

Hour 1:

- Thorax Anatomy
- Trunk Musculature
- Diaphragm
- Core-Inner group
- Outer Group Muscular Slings
    - Posterior Oblique
    - Deep Longitudinal
    - Anterior
    - Lateral
- Fascial integration
- Thorocolumbar fascia
- Mechanics of breathing in core stability
- Function of the Diaphragm
- Balance

Hour 2:

- Neuromuscular Control
- Spinal stability normal
- Relationship of passive stabilizers to active stabilizers to motor control and emotion
- Central nervous system on muscle tone and movement
- Neural stiffness and resting length and timing
- Dysfunction of the deep and superficial systems
- Fascial length issues
- Neural length issues

- Posture, triple core and gravity issues

Hour 3:

Video Lab Component 1 hour

- Length testing
    - Hamstrings, IT Band, gluteus maximus, gluteus medius posterior, gluteus medius anterior, TFL, psoas, erector spinae, lat dorsi, quadratus lumborum and hip rotators
- Muscle Function Testing
    - Supine active SLR
    - TA , Multifidus and Pelvic Floor
    - Posterior Oblique system
    - Anterior Oblique System
    - Lateral system
- Lengthening
- Core facilitation and training program progressions
- Respiration facilitation

Hour 4:

Dysfunction

- Diaphragm in dysfunction
- Postural derivations
- Elderly and scoliosis
- Incontinence
- Performance
    - Inspiratory muscle function and fatigue
    - Inspiratory muscle training theories

Instructional Methods and Formats:
Online course available 24/7 at www.OnlineCE.com includes Audiovisual course content with PDF downloadable worksheet. 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.