Note to Participants: There are interactive pop-up questions throughout this lecture. If you choose to pause the lecture and return at a later time, a natural break time would be after answering the interactive questions. (You are able to pause at any time and the presentation will “remember” where you were. It’s just a more natural time to pause after the interactive questions.) For your convenience, this outline reflects where/when within the lecture the interactive questions occur.

This lecture has 88 slides and is 90 minutes in duration.

I. Conditioning the hip/trunk
   A. Dynamic rotational movements and forces
      1. The core muscles
      2. Spinal stabilization
      3. Joint stabilization
   B. Categorization of the core muscles
      1. Local muscles
      2. Global muscles
   C. Muscle function

Interactive Questions – slide 25 @ 25 minutes

   D. Testing muscle endurance
   E. The pelvic myofascial system
   F. Testing the global hip/pelvis muscles
      1. Abductors
      2. Extensors
      3. Adductors
      4. Rotation of the femur
      5. Special tests
      6. Pelvic stability femoral rotators
      7. External rotators
      8. Internal rotators

Interactive Questions – slide 37 @ 40 minutes

   G. Dynamic EMG of trunk muscles: Golf movement
      1. During golf swing
      2. Muscle activity of the forward swing
   H. Exercises to strengthen golfers
      1. For global hip muscles
      2. For active joint stabilization
      3. Extension exercises
      4. Advanced exercises for spinal stability
   I. Muscle imbalances
J. Case studies
   2. Core stability measures as risk factors for lower extremity injury in athletes. (Leetun et al 2004)
   3. Sample patients: Low back pain in golfers

Interactive Questions – slide 60 @ 61 minutes

II. Compensatory swing mechanics
   A. Introduction
      1. The golf swing is a complex movement.
      2. The typical golfer wants to hit a home run.
      3. Golf injuries
   B. Evaluation of the golfer
      1. Test shoulder motion
      2. Possible physical limitations – trunk and hips

Interactive Questions – slide 76 @ 74 minutes

C. Golf-specific exercises for trunk stability
   1. Lateral muscles and abdominals
   2. Back muscles
   3. Hip strengthening exercises

D. Balance

E. Evaluation of the swing
   1. Initiation of downward swing
   2. Acceleration
   3. Finish

Interactive Questions – Slide 85 @ 86 minutes

F. Summary