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 51 slides and is 46 minutes in duration.

I. Introduction
   A. Components of the exercise prescription
   B. The evidence of strengthening exercise
   C. Slippery slope of aging
   D. Evidence of functional loss

Interactive Questions – slide 17 @ 18 minutes

II. Physical stress theory
   A. Tissues response to mechanical stress
   B. Components of mechanical stress
   C. Types of mechanical stress

Interactive Questions – slide 25 @ 25 minutes

III. Principles of exercise intervention
   A. Overload
   B. Task specificity

Interactive Questions – slide 28 @ 27 minutes

IV. Overload
   A. Intensity, duration, frequency and speed
   B. Outcomes based on overload by intensity
   C. Intensity and older adults, frail adults
   D. Frequency

Interactive Questions – slide 44 @ 36 minutes

V. Specificity
   A. Relationship between strength and function
   B. Specificity of seed in training (power)
   C. Tasks specificity
Bibliography


