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Functional Assessment and Exercise for the Aging Adult

Part 1: Strengthening Principles

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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 112 slides and is 116 minutes in duration.

- I. Introduction
 - A. Components of the exercise prescription
 - B. The evidence for strengthening exercise
 - C. Barriers to an effective exercise program
 - D. Slippery slope of aging
 - E. Evidence of functional loss

Interactive Questions – slide 14 @ 20 minutes

- II. Physical Stress Theory
 - A. Tissues response to mechanical stress
 - B. Components of mechanical stress
 - C. Types of mechanical stress

Interactive Questions – slide 20 @ 30 minutes

- III. Principles of Exercise Intervention
 - A. Overload
 - B. Task specificity

- IV. Overload
 - A. Intensity, duration, frequency and speed
 - B. Outcomes based on overload by intensity

Interactive Questions – slide 35 @ 55 minutes

- C. Intensity and older adults, frail adults
- D. Determining intensity
- E. Frequency

Interactive Questions – slide 42 @ 64 minutes

Notes

V. Specificity

- A. Relationship between strength and function
- B. Specificity of speed in training (power)

Interactive Questions – slide 54 @ 78 minutes

- C. Task specificity

Interactive Questions – slide 62 @ 91 minutes

Interactive Questions – slide 65 @ 94 minutes

Interactive Questions – slides 71 @ 98 minutes

Interactive Questions – slide 81 @ 105 minutes

VI. Other Considerations

- A. Motor learning
- B. Adapt versus Challenge
- C. Progression

Notes

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