



Course Title: Exercise Guidelines for Balance & Fall Prevention

Produced by: **Fitness Learning Systems**
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Course Type: **e-Learning Home Study**

Credit hours: AEA 5.0, ACSM 5.0, ATRI 0.5, COPS-KT 0.5, NSCA 0.5
NFPT 1.0, NCSF 2.5, YMCA 5.0, NSPA 5.0

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With a BA in Exercise Science and an MA in Gerontology, Sandy also maintains certification through NSCA as a CSCS (certified strength and conditioning specialist), ACE Personal Trainer and Group Exercise Instructor, Aquatic Therapy and Rehab Association (ATRIC), and AEA (Aquatic Exercise Association) Training Specialist. She is an adjunct professor in the department of human performance, international conference presenter/educator/author, and the Director of Operations for Alliance Rehab's SeniorFITness Division. She has over 18 years of experience in the fitness industry. She has produced 4 videos, authored and co-authored learning CD's through Fitness Learning Systems.

Course Summary:

The purpose of this course is to provide a comprehensive overview of Balance and Fall Prevention, the restrictions and limitations of working with this population, and specific recommendations regarding exercise protocol. It is designed to target risk factors for falls and incorporate an exercise program that will prepare the body and stimulate the mind for quicker decisions in difficult situations that lead to loss of balance and falling.

Objectives:

After completing this course you will:

1. Gain an understanding of the complexity of the multi-sensory aspect of balance.
2. Develop a relationship between risk factors and a fall prevention strategy.

3. Comprehension of risk factors, morbidity relationship, and other factors related to falls.
4. Be able to design an effective individualized fall prevention program.
5. Gain the ability to educate participants through practical prevention strategies.

Outline:

Balance and Fall Prevention Overview

Significance of Falls

Where Falls Occur

Risk Factors for Falls:

Read overviews:

Extrinsic risk factors

Intrinsic risk factors

Extrinsic Factors Charts:

Home Hazards

Outdoor Environmental Hazards

Activity Related Hazards

Intrinsic Factors Charts:

Chart 1

Chart 2

Reducing Risk Factors for Falls:

Practical Suggestions

Home Safety Checklist

Health and Safety Checklist

Interventions

Consequences of a Fall:

Physical Consequences

Social Consequences

Psychological Consequences

Nutrition:

Calcium

Vitamin D

Alcohol

Vitamin A

Balance:

Posture

Stability

Mobility

Postural Control Strategies:

The Ankle Strategy

The Hip Strategy
The Step Strategy

Systems that Contribute to Balance:

The Vestibular System
Vision
Somatosensory System
Muscular Strength and Joint Flexibility
Brain and Alertness

Age-Associated Changes in the Systems Contributing to Balance:

Overview
Changes in the Peripheral and Central Components of the Sensory System
Changes in the Central and Peripheral Components of the Motor System
Changes in the Cognitive System
Can Age-Associated Changes in Balance and Mobility Be Reversed?

Exercise Programming:

Benefits
Equipment for Exercise Programming
Program Design
Safety Reminders
Additional Suggestions to Participants
Motivation
Home Exercise Program
Aquatic Exercise

Balance Specific Guidelines and Exercises:

Exercise Progressions
Balance Specific Exercises

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