



Course Title:     **Basic Measurement & Body Composition Assessment**

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

Credit hours:    AEA 4.0, ACSM 3.0, ATRI 0.4, COPS-KT 0.4, NSCA 0.3  
NFPT 1.0, NCSF 2.0, YMCA 4.0, NSPA 4.0, NETA 4.0

Author:

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June Lindle was owner and manager of Harrison Health and Fitness Center near Cincinnati, Ohio for 15 years. After college, June pursued a career as an educator and taught elementary Physical Education for six years. She left teaching to pursue a Master's degree in Health Enhancement and Exercise Physiology. She has taught a variety of fitness classes since 1978, and has been presenting educational health/wellness lectures and fitness classes to corporations, the community and instructors since 1985 both in the U.S. and Internationally. June is proud to be an AEA Training Specialist since 1988, on the Aquatic Exercise Association Research Committee, and recipient of the AEA 1995 Achievement Award, and 2001 Contribution to the Aquatic Industry Award. She has served as Managing Editor for the Aquatic Fitness Professional Manual, A Guide to Aquatic Rubberized Resistance Exercises, AEA Aquatic Personal Trainer Manual, and the AEA Instructor Skills Manual. She serves as adjunct faculty for Cincinnati State College and has developed several class curriculums for their Health/ Fitness Technician degree program. She is president of Fitness Learning Systems, a company that provides innovative continuing education products for the fitness industry.

Course Summary:

Assessment is a critical part of a personal trainer's responsibilities. It can be used to aid the personal trainer in several ways. The most important function of assessment is to allow you to track the changes that are occurring in your client's health or fitness levels. Properly tracking these changes keeps you on target with programming, and justifies your services. Assessment should not be downplayed or omitted from the services you offer your client.

This course takes you through the basics of resting heart rate, resting blood pressure (video included), height, and weight measurement. With descriptions and video clips you

will learn to locate and measure ten skin-fold sites and nine body circumferences. Formulas and equations for Jackson/Pollock and a 7-site body composition, BMI, and calculations for recommended weight ranges.

### Objectives:

After completing this course you will:

1. have a better understanding of the Fitness/Health assessment process.
2. understand and be able to practice proper procedures for resting heart rate, resting blood pressure, height, weight, body circumference, skinfold, and BMI measurements.
3. be able to calculate a desired weight or weight range for your client.
4. have learned the procedures for the Jackson Pollock 3-fold skinfold method as well as a 7-fold method.
5. have learned proper technique for anatomical location for body circumference and skinfold measurement sites.
6. be able to avoid common mistakes made for skinfold and circumference measurement.

### Outline:

Purpose of Assessment

Health/Fitness Components Commonly Assessed:

- Resting Heart Rate
- Resting Blood Pressure
- Height and Weight
- Cardiorespiratory Fitness
- Muscular Fitness
- Strength
- Endurance
- Power
- Hypertrophy
- Flexibility
- Body Composition
- Skills Assessments (for athletic performance)

ACSM Assessment Order:

- Resting Heart Rate, Blood Pressure, Height, and Weight
- Body Composition, Body Measurements
- Cardiorespiratory Endurance
- Muscular Fitness
- Flexibility

Protocol

Test Validity, Reliability, and Objectivity:

- Validity
- Reliability
- Objectivity

## Protocol Choice

Assessment Administration

Assessment Interpretation

Professionalism

Basic Assessment:

Resting Heart Rate

Resting Blood Pressure

Height

Weight

Body Circumference Measurement

Body Composition Skinfold Assessment:

Skinfold Assessment Overview

Skinfold Assessment Sites/ Videos

Skinfold Prediction Equations

Recommended Weight/ Weight Ranges

BMI Measurement

## Bibliography:

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3. Principles of Anatomy and Physiology, Tortura and Grabowski. Harper Collins Publishers, 1996.
4. Exercise Physiology Laboratory Manual, Adams. McGraw-Hill Companies, Columbus, OH. 3rd edition, 1998.
5. Principles and Labs for Fitness and Wellness, Hoeger and Hoeger. Morton Publishing Company. 6th edition, 2002.
6. ACSM's Guidelines for Exercise Testing and Prescription, American College of Sports Medicine. Lippencott, Williams, and Wilkins Publishers. 6th edition, 2000.
7. "Practical Assessment of Body Composition," Andrew S. Jackson, PED and Michael L. Pollock, PhD. Physician and Sports Medicine, Vol 13, No. 5, May 1985.
8. Aquatic Personal Trainer Manual, Aquatic Exercise Association. Aquatic Exercise Association, Nokomis FL. 2000.