

Health Fitness Instructor Workshop Topics

Exercise Physiology (lecture)

- Muscle Physiology
- Cardiorespiratory Physiology
- Trained vs. untrained responses
- Energy Metabolism

Kinesiology (lecture)

- Bones and Connective Tissues
- Muscular actions and movement
- Joints in the body
- Biomechanical principles of movement
- Basic internal mechanics

Pathophysiology/Risk Factors (lecture)

- Coronary risk factor identification
- Pathophysiology of coronary artery disease (CAD)
- Cardiovascular clinical findings

Pre-Activity Screening: Risk Factors & Stratification (lecture)

- Pre-activity screening guidelines
- Components of health history
- Components of the medical history
- Contraindications to exercise testing
- Coronary artery disease (CAD) risk factor identification
- ACSM risk stratification process

Physical Fitness Testing (lecture)

- Health history questionnaire: risk factor review
- Rationale for fitness assessment
- Informed consent – rationale
- Environmental and laboratory concerns
- Fitness Assessment
- Interpretation/use of tests results

Cardio-Respiratory Fitness Assessment (practicum)

- Candidate Skill Development
- Candidate Sub-Maximal Test Protocol Practice

Metabolic Calculations (lecture/practicum)

- General Considerations
- Specific formulas/calculations

Health/Fitness Programming (lecture)

- Basic Knowledge of exercise prescription
- Exercise programming
- Components of a total fitness program
- Stretching/Flexibility programming guidelines
- Resistance training programming guidelines
- Precautions

Skinfold Techniques (practicum)

- Skinfold Sites
- Skinfold Techniques
- Waist to Hip Circumference (and waist circumference)
- BMI Determination

Muscular Fitness (practicum)

- Fitness Testing and Assessment of Flexibility/Strength Components of Physical Fitness

Programming for Special Populations (lecture)

- Coronary Heart Disease
- Pulmonary Dysfunction
- Metabolic Disorders
- Children
- Pregnancy (Pre/Post Natal)
- Exercise Concerns (ACOG recommendations)
- Musculoskeletal disorders
- Aging

Program Administration (lecture)

- Documentation of an Exercise Program
- Program development
- H/FI Role in Supporting Program Management
- Program Evaluation