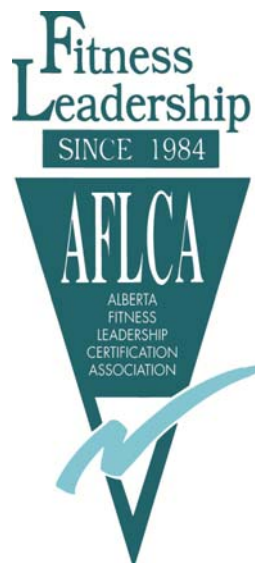




## **National Fitness Leadership Association**

### **Resistance Exercise Performance Standards**



## National Fitness Leadership Association Resistance Exercise Performance Standards

The **Resistance Exercise Leader** designs and implements a safe and effective class and/or provides weight room orientation and monitoring for apparently healthy participants.

**Resistance Exercise Leadership Performance Standards** build on the NFLA Exercise Theory Prerequisite Knowledge Base.

### Health-Related Benefits of Resistance Exercise

#### Performance Standard #1

The Resistance Exercise Leader describes the benefits of resistance training and its relationship to health and wellness.

#### Competencies

1. Lists the health benefits associated with resistance training
2. Uses evidence-based resistance training guidelines with program development (where possible Canadian data)
3. Explains the response and adaptability to resistance training

#### Performance Standard #2

The Resistance Exercise Leader identifies advantages and disadvantages of various types of resistance training and dispels common myths.

#### Competencies

1. Compares and contrasts different types of equipment that can be used for resistance training including advantages and disadvantages of machines and free weights, flexibility of use, degree of muscle involvement, ease of learning, time efficiency, and safety.
2. Dispels common resistance training myths.

### Leadership and Communication

#### Performance Standard #1

The Resistance Exercise Leader identifies and demonstrates qualities, strategies, and skills of effective leadership.

#### Competencies

1. Employs professional qualities of leadership and leadership strategies in the delivery of exercise sessions to encourage program adherence.
2. Exhibits effective motivation techniques to encourage program adherence.

#### Performance Standard #2

The Resistance Exercise Leader demonstrates a variety of effective communication techniques.

## Competencies

1. Effectively utilizes both verbal, visual and kinesthetic cueing
2. Describes how to enhance verbal, visual and kinesthetic cueing to improve exercise technique of participants
3. Effectively applies techniques of giving and receiving feedback with participants
4. Utilizes techniques to reduce voice injury

## Performance Standard #3

The Resistance Exercise Leader demonstrates knowledge of group dynamics.

## Competencies

1. Creates a supportive, participant-centred environment
2. Identifies and minimizes challenges in leading exercise sessions within the fitness centre environment
3. Monitors the stages of group development and takes specific actions to improve group dynamics.
4. Identifies behaviour modification strategies for motivating individuals based on the Transtheoretical Model of Behaviour Change (Stages of Change Theory)

## Anatomy

## Performance Standard

The Resistance Exercise Leader demonstrates knowledge of human anatomy.

## Competencies

1. Correctly identifies the following muscles within the exercise setting (in addition to those covered in AFLCA Exercise Theory Prerequisite Knowledge Base): serratus anterior, pectoralis minor, hamstrings (biceps femoris, semitendinosus, semimembranosus), rotator cuff (subscapularis, infraspinatus, teres minor, supraspinatus), sartorius, hip adductors (pectineus, gracilis, adductor longus, adductor magnus, adductor brevis), hip abductors (gluteus minimus, gluteus medius, tensor fasciae latae (IT band)).
2. Describes how the skeleton and its supporting structures are involved during resistive based exercises.
3. Utilizes the neuromuscular reflexes (stretch reflex, inverse stretch reflex) appropriately to affect the range of motion and joint stability of participants.

## Movement Mechanics

## Performance Standard

The Resistance Exercise Leader applies the biomechanics involved in human movement.

## Competencies

For these common exercises: bicep curl; row; triceps extension; chest press; hamstring curl; planks; shoulder press; abdominal curl with rotation; back extension; calf raise; leg—abduction, adduction, flexion, and extension; arm abduction, adduction, flexion, and extension, the leader describes, analyzes and demonstrates, as appropriate.

1. The exercise for prime mover, stabilizing muscle(s), and the type of contraction for each phase of the exercise
2. Varying the intensity of each exercise through application of the principle of levers
3. Balances conditioning exercises for the muscles surrounding the major joints
4. The appropriate static stretch(es) for the muscles used in each exercise
5. The terms “single joint” and “multi-joint” exercises and identifies which exercises are examples of each
6. Effective breathing techniques during each exercise
7. Proper lifting and spotting techniques with each exercise
8. The use of correct mechanics to control speed of movement
9. How the concepts of base of support and centre of gravity apply to each exercise

## Types of Resistance and Force Production

### Performance Standard #1

The Resistance Exercise Leader demonstrates knowledge and applies exercise physiology underlying resistance training and human movement.

#### Competencies

1. Explains how eccentric contractions and muscle soreness relate to unfamiliar exercises and beginning exercise participants.
2. Explains the force production possible with common types of resistance training equipment, including dynamic constant, dynamic variable, dynamic progressive, and isokinetic.

### Performance Standard #2

The Resistance Exercise Leader demonstrates knowledge of resistance training physiology.

#### Competencies

1. Explains the physiological changes that occur with resistance training, including neuromuscular recruitment, muscular hypertrophy, body composition, metabolism, muscular strength, bone mineral density, energy systems, muscular endurance, blood lipids, and glucose and insulin levels.
2. Differentiates between slow and fast twitch muscle fibre types and how each applies to exercise selection.

## Practical Knowledge

### Performance Standard #1

The Resistance Exercise Leader identifies the core muscles and common exercises used in training.

#### Competencies

1. States the key function(s) of each core muscle, as outlined in Exercise Theory  
Prerequisite Knowledge Base
2. Explains the importance of the core muscles in every day movements
3. Identifies, analyzes and selects effective resistance training exercises for core muscles
4. Explains the importance of postural alignment and its implications within resistance training

5. States the key techniques, precautions, and safety considerations for core stability and mobility exercises

### **Performance Standard #2**

The Resistance Exercise Leader identifies upper body muscles and common exercises used in training.

#### **Competencies**

1. States the key functions of each upper body muscle, as identified in Exercise Theory Prerequisite Knowledge Base, with the addition of serratus anterior, pectoralis minor, and rotator cuff muscles (supraspinatus, infraspinatus, teres minor, subscapularis)
2. Explains the importance of the upper body muscles in everyday activities
3. Identifies, analyzes and selects effective resistance training exercises for upper body muscles
4. Explains the importance of postural alignment and its implications within resistance training
5. States the key techniques, precautions, and safety considerations for upper body stability and mobility exercises

### **Performance Standard #3**

The Resistance Exercise Leader identifies lower body muscles and common exercises used in training.

#### **Competencies**

1. States the key functions of each lower body muscle, as outlined in Exercise Theory Prerequisite Knowledge Base
2. Explains the importance of the lower body muscles in everyday activities
3. Identifies, analyzes and selects effective resistance training exercises for lower body muscles
4. Explains the importance of postural alignment and its implications within resistance training
5. States the key techniques, precautions, and safety considerations for lower body stability and mobility exercises

## **Program Planning**

### **Performance Standard**

The Resistance Exercise Leader creates a safe, effective, balanced full-body exercise class through effective exercise selection and established training principles and methods.

#### **Competencies**

1. Describes how to cross train within a resistance training program
2. Applies common workout terms: reps, sets, and loads appropriately
3. Applies the FITT principle in a resistance training environment, including muscular strength, muscular endurance, and muscular hypertrophy
4. Demonstrates evidence-based strength training guidelines, including recommendations supporting resistance training minimums
5. Identifies methods to monitor resistance exercise intensity
6. Demonstrates the following concepts in class design: frequency of resistance training workouts, number of exercises (including balance of opposing muscle groups), workout

- length, exercise order, HIIT, rest between sets and workouts, and application of established training principles as they relate to a resistance training programs
7. Describes the components of an exercise class
  8. Describes ways to evaluate the effectiveness of class design

## Professional Practice & Risk Management

### Performance Standard #1

The Resistance Exercise Leader demonstrates professional conduct in the exercise setting.

#### Competencies

1. Adheres to the scope of practice
2. Acts in accordance to the code of conduct
3. Acts as an informed resource to colleagues and participants
4. Understands the role of maintaining accreditation to continued professionalism
5. Understands the role of continued education to continued professionalism

### Performance Standard #2:

The Resistance Exercise Leader designs and conducts classes in such a way to minimize and manage risk.

1. Utilizes pre-screening strategies for safe program delivery for participants and their participation in physical activity (e.g., PAR-Q+, ePARmed-X+)
2. Use of space effectivity to account for safety issues and needs of participants with visual, hearing, proprioception or cognitive impairments
3. Familiar with Emergency Action Plan requirements, including safety issues related to but not limited to floor surfaces, proper footwear, lighting, acoustics, telephone, ventilation, and accessibility to water, washrooms, facility emergency procedures and exits
4. Aware of how facility type, size, location, etc. impacts exercise programming