National Fitness Leadership Alliance

Resistance Training
Performance Standards
2015

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Resistance Training Leadership Performance Standards

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

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

Health-Related Benefits of Resistance Training

Performance Standard #1
The Resistance Training 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 (where possible Canadian data)
3. Indicates the response and adaptability to resistance training

Performance Standard #2
The Resistance Training Leader identifies advantages and disadvantages of various types of resistance training and dispels common myths.

Competencies
1. Describes different types of equipment that can be used for resistance training
2. Identifies advantages and disadvantages of machines and free weights regarding flexibility of use, degree of muscle involvement, ease of learning, time efficiency, and safety
3. Describes and dispels common resistance training myths

Anatomy

Performance Standard
The Resistance Training Leader demonstrates knowledge of human anatomy.

Competencies
1. Identifies the following muscles (in addition to those covered in NFLA Prerequisite Knowledge Base): serratus anterior, pectoralis minor, hamstrings (biceps femoris, semitendinosus, semimembranosus), rotator cuff (subscapularis,

infraspinatus, teres minor, supraspinatus), sartorius, tensor fasciae latae (IT band)
2. Describes the neuromuscular reflexes (stretch reflex, inverse stretch reflex) and how they affect range of motion and joint stability

Movement Mechanics

Performance Standard
The Resistance Training Leader applies and explains 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,

1. Identifies the prime mover, stabilizing muscles, and the type of contraction for each phase of the exercise
2. Identifies the stabilizing muscle and/or muscle groups, and describes the effect on continued exercise execution
3. Using the principle of levers, explains how to vary the intensity of each exercise
4. Describes how to balance conditioning exercises for the muscles surrounding the major joints
5. Identifies the appropriate static stretch for the muscles used in each exercise
6. Defines the terms “single joint” and “multi-joint” exercises and identifies which exercises are examples of each
7. Demonstrates the importance of specific breathing techniques during each exercise
8. Demonstrates proper lifting and spotting techniques within each exercise
9. Demonstrates the use of correct mechanics to control speed of movement
10. Determines and describes how the concepts of base of support and centre of gravity apply in each exercise

Types of Resistance and Force Production

Performance Standard #1
The Resistance Training Leader demonstrates knowledge and applies exercise physiology underlying resistance training and human movement.

Competencies

1. Identifies the impact of eccentric contractions and muscle soreness related to unfamiliar exercises and beginning exercise participants
2. Identifies 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 Training Leader demonstrates knowledge of resistance training physiology.

Competencies
1. Describes 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. Defines a motor unit and describes the changes that occur with resistance training (muscular strength, endurance, and hypertrophy)
3. Identifies the structure of muscle: myofibrils, muscle cells, actin, and myosin
4. Identifies the function of muscle fibres, myofibrils, muscle cells, actin, and myosin

Leadership and Communication

I Leadership

Performance Standard #1
The Resistance Training Leader identifies and demonstrates qualities, strategies, and skills of effective leadership.

Competencies
1. Identifies professional qualities of leadership
2. Employs the skills of effective resistance training exercise leaders
3. Applies leadership strategies in the delivery of group exercise classes
4. Exhibits effective leadership styles and motivation techniques

II Communication

Performance Standard #2
The Resistance Training Leader recognizes and demonstrates a variety of effective communication techniques.

Competencies
1. Distinguishes between verbal and visual cueing
2. Describes how to enhance verbal and visual cueing
3. Utilizes effective communication skills
4. Applies techniques of giving and receiving feedback
5. Identifies techniques to reduce voice injury

III Working with Groups

Performance Standard #3
The Resistance Training Leader demonstrates knowledge of group dynamics.

Competencies:
1. Explains how to create a supportive, participant-centred environment
2. Identifies and minimizes challenges in leading group exercise classes
3. Explains and employs the stages of group development

Professional Practice

Performance Standard
The Resistance Training Leader demonstrates professional conduct in a group 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 class participants
4. Maintains accreditation
5. Demonstrates commitment to continued education and professional development

Practical Knowledge

Performance Standard #1
The Resistance Training 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
3. Describes resistance training for core muscles
4. Describes postural alignment and implications within resistance training
5. States the key techniques, precautions, and safety considerations for core stability and mobility exercises

Performance Standard #2
The Resistance Training 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
3. Describes resistance training for upper body muscles
4. Describes postural alignment and 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 Training 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
3. Describes resistance training for lower body muscles
4. Describes postural alignment and 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 Training 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. Defines and applies common workout terms: reps, sets, and loads
3. Applies the FITT principle in a resistance training environment, including muscular strength, muscular endurance, and muscular hypertrophy
4. Explains and applies repetition guidelines for muscular strength, endurance, and hypertrophy
5. Describes established training methods and principles
6. Demonstrates evidence-based strength training guidelines, including recommendations supporting resistance training minimums
7. Differentiates between slow and fast twitch muscle fibre types and how each

applies to exercise selection

8. Demonstrates the following concepts: frequency of resistance training workouts, number of exercises (including balance of opposing muscle groups), workout length, exercise order, rest between sets and workouts, and application of established training principles as they relate to a resistance training programs and classes
9. Identifies the importance of health pre-screening
10. Assesses and addresses potential environmental safety issues
11. Assesses and addresses potential equipment safety issues
12. Recognizes the implications of legal issues
13. Identifies common emergency procedures and the exercise leader's role in response to emergencies