
Postgraduate Certificate in Functional Assessment

Exercise Prescription and Program Design

Exercise Prescription and Program Design Glossary

Aerobic Exercise: Aerobic exercise, also known as cardiovascular exercise, is any activity that increases your heart rate and helps improve the efficiency of your cardiovascular system. Examples include running, cycling, and swimming.

Agonist: The agonist muscle is the primary muscle responsible for the movement that is being performed, while the antagonist muscle is the muscle that opposes the movement.

Anaerobic Exercise: Anaerobic exercise is a high-intensity workout that does not require oxygen for energy production. Examples include weight lifting and sprinting.

Baseline Assessment: A baseline assessment is an initial evaluation of an individual's current fitness level, which serves as a starting point for developing an exercise program.

Body Composition: Body composition refers to the ratio of fat to lean tissue in the body. It is an important component of overall health and fitness.

Cardiorespiratory Fitness: Cardiorespiratory fitness is the ability of the heart, lungs, and circulatory system to supply oxygen to the muscles during sustained physical activity. It is a key component of overall fitness.

Core Stability: Core stability refers to the ability of the muscles in the abdomen, pelvis, and lower back to work together to support the spine and maintain proper posture.

Cross-Training: Cross-training involves incorporating a variety of different types of exercises into a workout routine to prevent boredom, reduce the risk of overuse injuries, and improve overall fitness.

Dynamic Stretching: Dynamic stretching involves moving the muscles and joints through a full range of motion in a controlled manner. It is typically performed as part of a warm-up before exercise.

Endurance Training: Endurance training involves performing low to moderate-intensity exercise for an extended period of time to improve cardiovascular fitness and stamina.

Flexibility: Flexibility refers to the range of motion in a joint or series of joints. It is important for preventing injuries and maintaining overall mobility.

Functional Assessment: A functional assessment is an evaluation of an individual's ability to perform everyday tasks and activities. It is used to identify areas of weakness or dysfunction that may impact exercise programming.

High-Intensity Interval Training (HIIT): HIIT involves alternating between short bursts of intense exercise and

periods of rest or lower-intensity exercise. It is an effective way to improve cardiovascular fitness and burn calories.

Interval Training: Interval training involves alternating between periods of high-intensity exercise and periods of lower-intensity exercise or rest. It is an effective way to improve cardiovascular fitness and endurance.

Isometric Exercise: Isometric exercise involves contracting the muscles without changing the length of the muscle or joint. It is often used to improve strength and stability.

Maximal Oxygen Consumption (VO2 max): VO2 max is the maximum amount of oxygen that an individual can use during intense exercise. It is a measure of cardiovascular fitness and endurance.

Muscular Endurance: Muscular endurance is the ability of a muscle or group of muscles to perform repeated contractions over a period of time. It is important for activities that require sustained effort.

Muscular Strength: Muscular strength is the amount of force that a muscle can generate against resistance. It is important for activities that require power and explosiveness.

Periodization: Periodization is the systematic planning of a training program to ensure that the individual progresses in a safe and effective manner. It involves dividing the program into distinct phases with specific goals.

Postural Assessment: A postural assessment is an evaluation of an individual's alignment and positioning of the joints and muscles at rest and during movement. It is used to identify imbalances and areas of weakness.

Progressive Overload: Progressive overload is the gradual increase in the intensity, duration, or frequency of exercise to continually challenge the body and promote adaptations.

Range of Motion: Range of motion refers to the distance and direction that a joint can move between the flexed position and the extended position. It is important for maintaining flexibility and preventing injury.

Recovery: Recovery refers to the period of rest and regeneration that follows a workout. It is important for allowing the body to repair and adapt to the stress of exercise.

Resistance Training: Resistance training involves using weights, resistance bands, or body weight to strengthen the muscles. It is important for building muscle mass, increasing strength, and improving bone density.

Resting Heart Rate: Resting heart rate is the number of times the heart beats per minute while at rest. It is an indicator of cardiovascular fitness and overall health.

Static Stretching: Static stretching involves holding a stretch for a period of time without moving. It is typically performed after a workout to improve flexibility and reduce muscle tension.

Strength Training: Strength training involves using resistance to build strength, power, and endurance in the

muscles. It is important for improving overall fitness and preventing injury.

Stress Test: A stress test is a diagnostic test that evaluates the heart's ability to respond to stress. It is often used to assess cardiovascular fitness and identify heart problems.

Target Heart Rate: Target heart rate is the range of heartbeats per minute that is recommended during aerobic exercise to achieve maximum cardiovascular benefits. It is typically calculated based on age and fitness level.

Warm-Up: A warm-up is a period of light aerobic exercise and stretching performed before a workout to prepare the body for more intense exercise. It helps increase blood flow to the muscles and reduce the risk of injury.

Workout Intensity: Workout intensity refers to the level of effort or energy expenditure during exercise. It is typically measured using heart rate, perceived exertion, or the amount of weight lifted.