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Professional Certificate in Physical Therapy Techniques

## Therapeutic Exercise Prescription

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**Aerobic Capacity:** Aerobic capacity refers to the body's ability to use oxygen to generate energy during prolonged periods of moderate-intensity exercise. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve cardiovascular fitness and overall health. Related terms include anaerobic capacity, muscular endurance, and cardiovascular endurance.

**Aerobic Exercise:** Aerobic exercise is a type of exercise that requires the use of oxygen to generate energy. Examples of aerobic exercises include walking, jogging, cycling, and swimming. Aerobic exercises are often prescribed by physical therapists to improve cardiovascular fitness, increase muscle endurance, and enhance overall health.

**Anaerobic Capacity:** Anaerobic capacity refers to the body's ability to generate energy without the use of oxygen. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve muscular power and speed. Related terms include aerobic capacity, muscular endurance, and neuromuscular control.

**Aquatic Therapy:** Aquatic therapy is a type of therapy that uses water to promote relaxation, reduce pain, and improve mobility. It is often prescribed by physical therapists to patients with chronic pain, arthritis, or other conditions that affect mobility. Related terms include hydrotherapy, pool therapy, and watsu.

**Assessment:** Assessment refers to the process of evaluating a patient's physical abilities, limitations, and needs. It is an important step in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that are tailored to the patient's specific needs. Related terms include evaluation, examination, and diagnosis.

**Balance:** Balance refers to the ability to maintain equilibrium and prevent falls. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve balance and reduce the risk of falls. Related terms include proprioception, vestibular function, and muscle strength.

**Biomechanics:** Biomechanics refers to the study of the movement and function of the human body. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that are based on the principles of biomechanics and physics. Related terms include anatomy, physiology, and kinesiology.

**Cardiovascular Endurance:** Cardiovascular endurance refers to the ability of the heart, lungs, and blood

vessels to supply oxygen to the muscles during prolonged periods of exercise. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve cardiovascular fitness and overall health. Related terms include aerobic capacity, muscular endurance, and cardiovascular health.

**Cryotherapy:** Cryotherapy is a type of therapy that uses cold temperatures to reduce pain, inflammation, and muscle spasms. It is often prescribed by physical therapists to patients with acute injuries or conditions such as arthritis. Related terms include heat therapy, cold therapy, and thermotherapy.

**Electrotherapy:** Electrotherapy is a type of therapy that uses electrical currents to stimulate muscle contractions, reduce pain, and improve mobility. It is often prescribed by physical therapists to patients with muscle weakness, paralysis, or other conditions that affect mobility. Related terms include electrical stimulation, electromyography, and transcutaneous electrical nerve stimulation.

**Exercise Program:** An exercise program is a series of exercises that are designed to achieve specific goals, such as improving strength, flexibility, or cardiovascular endurance. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that are tailored to the patient's specific needs. Related terms include exercise prescription, workout routine, and fitness program.

**Flexibility:** Flexibility refers to the range of motion of the joints and the ability to move freely. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve flexibility and reduce the risk of injury. Related terms include range of motion, muscle length, and joint mobility.

**Gait:** Gait refers to the manner in which a person walks or moves. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve gait and reduce the risk of falls. Related terms include walking, running, and balance.

**Heat Therapy:** Heat therapy is a type of therapy that uses heat to reduce pain, inflammation, and muscle spasms. Related terms include cold therapy, thermotherapy, and cryotherapy.

**Hydrotherapy:** Hydrotherapy is a type of therapy that uses water to promote relaxation, reduce pain, and improve mobility. Related terms include aquatic therapy, pool therapy, and watsu.

**Kinesiology:** Kinesiology refers to the study of human movement and the principles of biomechanics and physics that apply to movement. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that are based on the principles of kinesiology and anatomy. Related terms include anatomy, physiology, and biomechanics.

**Manual Therapy:** Manual therapy is a type of therapy that uses manual techniques, such as massage, joint mobilization, and soft tissue mobilization, to promote relaxation, reduce pain, and improve mobility. It is

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often prescribed by physical therapists to patients with muscle tension, joint pain, or other conditions that affect mobility. Related terms include massage therapy, joint mobilization, and soft tissue mobilization.

**Motor Control:** Motor control refers to the ability to control and coordinate movement. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve motor control and reduce the risk of injury. Related terms include neuromuscular control, proprioception, and balance.

**Muscle Endurance:** Muscle endurance refers to the ability of the muscles to sustain activity over a prolonged period of time. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve muscle endurance and reduce the risk of fatigue. Related terms include muscle strength, cardiovascular endurance, and aerobic capacity.

**Muscle Strength:** Muscle strength refers to the ability of the muscles to generate force. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve muscle strength and reduce the risk of injury. Related terms include muscle endurance, power, and resistance training.

**Neuromuscular Control:** Neuromuscular control refers to the ability to control and coordinate movement through the use of the nervous system and muscles. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve neuromuscular control and reduce the risk of injury. Related terms include motor control, proprioception, and balance.

**Orthotics:** Orthotics refers to the use of devices, such as splints, braces, and shoe inserts, to support and stabilize the joints and muscles. It is often prescribed by physical therapists to patients with muscle weakness, joint pain, or other conditions that affect mobility. Related terms include prosthetics, assistive devices, and adaptive equipment.

**Pain Management:** Pain management refers to the use of techniques, such as exercise, manual therapy, and electrotherapy, to reduce and manage pain. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that reduce and manage pain and improve mobility. Related terms include pain relief, pain reduction, and pain management.

**Physical Therapy:** Physical therapy is a type of therapy that uses exercise, manual therapy, and other techniques to promote relaxation, reduce pain, and improve mobility. Related terms include occupational therapy, speech therapy, and rehabilitation.

**Posture:** Posture refers to the position and alignment of the body. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve posture and reduce the risk of injury. Related terms include body mechanics, ergonomics, and biomechanics.

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**Proprioception:** Proprioception refers to the ability to sense the position and movement of the body. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve proprioception and reduce the risk of injury. Related terms include balance, motor control, and neuromuscular control.

**Range of Motion:** Range of motion refers to the extent to which a joint can move. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve range of motion and reduce the risk of injury. Related terms include flexibility, joint mobility, and muscle length.

**Rehabilitation:** Rehabilitation refers to the process of restoring function and mobility after injury or illness. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that promote rehabilitation and reduce the risk of re-injury. Related terms include physical therapy, occupational therapy, and speech therapy.

**Resistance Training:** Resistance training refers to the use of weights, resistance bands, or other forms of resistance to improve muscle strength and endurance. Related terms include strength training, weight training, and exercise program.

**Therapeutic Exercise:** Therapeutic exercise refers to the use of exercise to promote relaxation, reduce pain, and improve mobility. Related terms include exercise program, workout routine, and fitness program.

**Therapeutic Exercise Prescription:** Therapeutic exercise prescription refers to the process of designing an exercise program that is tailored to the patient's specific needs and goals. It is an important concept in physical therapy, as it helps physical therapists to design exercise programs that promote rehabilitation, reduce the risk of re-injury, and improve overall health.

**Transcutaneous Electrical Nerve Stimulation:** Transcutaneous electrical nerve stimulation is a type of therapy that uses electrical currents to stimulate nerve endings and reduce pain. Related terms include electrotherapy, electrical stimulation, and nerve stimulation.

**Vestibular Rehabilitation:** Vestibular rehabilitation refers to the use of exercises and techniques to improve balance and reduce the risk of falls. It is an important concept in therapeutic exercise prescription, as it helps physical therapists to design exercise programs that improve vestibular function and reduce the risk of injury. Related terms include balance, proprioception, and neuromuscular control.

**Watsu:** Watsu is a type of aquatic therapy that uses water to promote relaxation, reduce pain, and improve mobility. Related terms include aquatic therapy, hydrotherapy, and pool therapy.

**Workout Routine:** A workout routine is a series of exercises that are designed to achieve specific goals, such as improving strength, flexibility, or cardiovascular endurance. Related terms include exercise program,

fitness program, and therapeutic exercise.