

# Thera-Band™

## ACADEMY™

### Functional Progression in Lower Extremity Sports Rehabilitation Phil Page, MS, PT, ATC

- I. Integrate OKC & CKC exercise
- II. Find the weak link! Correct biomechanics first
- III. Provide inexpensive, portable, versatile and effective exercises

#### A. Treat exercise as a modality : Exercise Prescription & Dosing

Goal	Metabolism	Intensity (% 1RM)	Intensity (xRM)	Rating of Perceived Exertion (Borg CR10)
Strength & Power	ATP/CP 1:3-5	100%		* absolute maximum
		90%	3 RM	11
High Intensity Endurance & Speed	Lactic Acid 1:2-3	85%	6 RM	10 extremely strong
		75%	10 RM	9
		70%	12 RM	8
				7 very strong
Low Intensity Endurance	Aerobic 1:1			6
				5 strong
			20 RM	4
			25 RM	3 moderate
				2 weak
				1 very weak
				0 nothing at all

B. Strengthen proximal core (hips, low back, abdominals)

C. Control Inflammation : **AVOID redness, warmth, swelling, pain**

#### IV. Follow the 3-P's

##### POSTURE

- Get into functional position → strengthen in that position → challenge
- Proper Posture & Technique : AVOID COMPENSATIONS
- Postural Stability : ability to maintain center of gravity within limits of stability within base of support

##### PROPRIOCEPTION

- Unconscious, cumulative afferent neural input into CNS
- Integral part of neuromuscular system (postural stability)
- SAID principle
- Perform exercises with high proprioceptive demand → challenge
- Acceleration ←→BALANCE←→Deceleration

##### PROGRESSION

- Exercise Progression

<p><u>Proprioceptive Progression</u>          bilateral→unilateral          supported→unsupported          eyes open→eyes closed          steady →unsteady surface          no implements→implements          static→dynamic activity</p>	<p><u>Running Progression</u>          walk→jog→sprint          forward→backward→lateral          slow→fast          acceleration→deceleration          figure 8→circles          cutting 0→90°</p>
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- Functional Progression

PHASE
Cardiovascular
Functional Flexibility
Core Strength (proximal: hips, abs, low back)
Base Strength (joint-specific, isolated)
Balance & Dynamic Stability
PAST (Power, Agility, Speed Training)
Re-entry program
Preventive Maintenance program

V. LAB

**FUNCTIONAL FLEXIBILITY**

**CORE STRENGTH**

**BASE STRENGTH**

**BALANCE/ DYNAMIC STABILITY**

**PAST**

**RE-ENTRY PROGRAM**

**PREVENTIVE MAINTENANCE**