Athlete Readiness Assessment
XC- Skiing

**Athlete Readiness Assessment**
**Exercise and Scoring Guide**

The Athlete Readiness Assessment is a series of basic movements used to identify areas of strength / weakens and mobility limitations in basic athletic movements. Results of these tests can be used to help coaches and trainers adjust athlete’s training programs to address movement deficiencies and work toward building stronger fundamental movement mechanics.

1. **Bodyweight squat**
   **Basic consistent squat mechanics**
   - Total body weight coordination and body weight management
   - Functional ankle and hip mobility
   - May expose leg length discrepancy

   **Instructions:**
   - Hands lace behind head, Eyes straight ahead
   - Shoulder with foot placement with slight tilt out
   - Hold best squat position for count of three then stand up and do five squats
   - Approximately one per second come to full extension with each squat

   **Scoring Criteria:**
   - Loss of hip/ Knees alignment during descent (hip and knee ext strength)
   - Loss of hip/ Knees alignment during ascent (hip and knee ext strength)
   - Foot Pronation (ankle mob, foot awareness)
   - Excessive foot external rotation
   - Heel comes off ground
   - Shin and torso not parallel in bottom position (LE strength , ankle mob)
   - Loss of torso control frontal plan (LE strength, torso control)
   - Loss of torso control sagittal plan (LE strength, torso control)
   - Loss of neutral spine
   - Depth not below parallel

   **Scoring:**
   - 1 = unable to attempt
   - 2 = attempts 5 squats w/ marked deficits
   - 3 = completes 5 squats w / moderate deficits
   - 4 = completes 5 squats w minor compensation
   - 5 = completes 5 squats without compensation at 1 per second
2. 2 Way Lunge: Forward & Lateral

Basic lunge mechanics
- Dynamic balance via loading and unloading of single limb in all planes
- Dynamic view of anterior and posterior hip mobility in weight bearing

Instructions:
Forward lunge
- Hands on hips
- Step forward into lunge with right leg to parallel
- Hold for a count of three
- Return to standing
- Repeat for three reps
- Repeat with left leg

Lateral lunge
- Hands on Hips
- Step directly out to the side w/ right leg until parallel, keeping both feet flat
- Return to center
- Repeat 3 reps
- Repeat with left leg

Scoring Criteria:
- Loss of hip/ Knees alignment during descent (hip and knee ext strength)
- Loss of hip/ Knees alignment during ascent (hip and knee ext strength)
- Foot Pronation (ankle mob, foot awareness)
- Any foot external rotation
- Front heel comes off ground
- Shin and torso not parallel in bottom position (LE strength , ankle mob)
- Loss of torso control frontal plan (LE strength, torso control)
- Loss of torso control sagittal plan (LE strength, torso control)
- Loss of neutral spine
- Depth not below parallel

Scoring:
1 = unable to attempt
2 = attempts 3 fwd or lateral lunges w/ marked deficits
3 = completes 3 fwd or lateral lunges w / moderate deficits
4 = completes 3 fwd or lateral lunges w minor compensation
5 = completes 3 fwd or lateral lunges without compensation
3. Single Leg Squat

**Body weight management in context of single leg strength and control**
- Supports functional ankle and hip mobility
- May demonstrate asymmetry of strength and mobility
- May highlight knee pain

**Instruction:**
- Start seated on a DC Block from knee level w/ legs parallel (knee crease and top of calf = 90 degree angle)
- Arms in across chest
- Heels against stacked DC Block, shin forward (knee toward toe)
- Sit bones on edge of box, pelvis neutral
- Come to standing from seated position on right leg, lower body w/ control down to box
- Repeat 3 total reps
- Repeat left leg

**Scoring Criteria:**

- Loss of hip/ Knees alignment during descent
- Loss of hip/ Knees alignment during ascent
- Foot Pronation
- Any foot external rotation
- Heel comes off ground
- Shin and torso not parallel in bottom position
- Loss of torso control frontal plan
- Loss of torso control sagittal plan
- Loss of neutral spine

**Scoring:**
- 1 = unable to attempt
- 2 = attempts 3 squats w/ marked deficits
- 3 = completes 3 squats w/ moderate deficits
- 4 = completes 3 squats w/ minor compensation
- 5 = completes 3 squats without compensation
4. CMJ Landing Mechanics
Body weight management in context to jumping and landing mechanics

- Functional ankle and hip mobility
- Pre test for performance force place
- Double to Double leg landing in place - single response x 3
- Single to single leg landing in place - single response x 3

Instructions
- Arms at side, eye straight ahead
- Hip width foot placement (2nd toe in line w knee) for Dbl to Dbl
- Middle toe in line with knee for single to single
- Jump using arm swing
- Land in same place,
- Hold landing position for 3 count
- Return to standing and repeat for total of 3 jumps

Scoring criteria / compensation

- Loss of hip/knee alignment during CM (hip & knee ext strength)
- Loss of hip/knee alignment during landing (hip & knee ext strength)
- Foot Pronation (ankle mobility, foot awareness)
- Heel comes off ground
- Loss of torso control frontal plan (LE strength, torso control)
- Loss of torso control sagittal plan (LE strength, torso control)
- Arms not in sync with CM & take off

Scoring:
1 = unable to attempt
2 = attempts 3 CMJ w/ marked deficits
3 = completes 3 CMJ w/ moderate deficits
4 = completes 3 CMJ w/ minor compensation
5 = completes 3 CMJ without compensation
5. Dead Stop Push Up

Body weight management in a context of upper body push in prone position
- Total body coordination
- Torso control and integrity
- May highlight shoulder wrist or elbow pain

Instruction:
- Lie prone on the floor with hands just below arm pits, thumb width from torso
- Tuck chin and place forehead on floor
- Feet at hip width toes dug into floor
- Tuck read end in and make torso ridged
- Push up starting from this position
- Pause when elbows are fully extended
- Return to starting position w/ control
- Repeat for 1 rep

Scoring criteria
- Head not aliened w/ scapulae, chin tucked
- Loss of chin tuck
- Elbows greater than 45-60 degrees from torso
- Hands not at armpit
- Hips/chest do not lower/raise as unit
- Excessive tipping or winging or scapulae
- Lack of controlled decent or ascent

Scoring:
- 1 = unable to attempt
- 2 = attempts but unable to push up to final position
- 3 = completes 1 rep w/ moderate deficits
- 4 = completes 1 rep w/ minor compensation
- 5 = completes 1 rep without compensation
6. Pull up / Horizontal Bodyweight Row

Body weight management in a context of upper body pull in prone position
- Total body coordination
- Torso control and integrity
- May highlight shoulder wrist (grip) or elbow pain

Instruction:
- In Smith Rack, place feet on bench and hand at shoulder with thumbs around bar
- Make sure bar is just below the nipple line
- Bring body to horizontal position keeping chin tucked and head in line with body
- Pull torso up keeping hip and shoulder inline
- Return in control to starting position of horizontal hang
- Repeat for 1 rep w/ control

Scoring criteria:
- Head not aliened w/ scapulae, chin tucked
- Loss of chin tuck
- Hips/chest do not lower/raise as unit
- Lack of controlled decent or ascent

Scoring:
- 1 = unable to attempt
- 2 = attempts but unable to pull up to final position
- 3 = completes 1 rep w/ moderate deficits
- 4 = completes 1 rep w/ minor compensation
- 5 = completes 1 rep without compensation