

# Ski Strength Conditioning and Injury Prevention – Video Reference Guide

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This exercise list is compiled to accompany the Ski Strength Condition Video by Hilary McCloy, Physical Therapist with the US Alpine Ski Team which can be viewed here: <https://youtu.be/qv2zrsPVzYU>. We recommend you watch the videos which are accompanied by some specific instructions. The plan progresses over 5 weeks, and each week involves 5-6 different exercises, each exercise lasting 1 minute, repeated 3 times for a total of 15 minutes. Repeat 3 times per week.

## Week 1 Squats



Ensure knees and toes are aligned.  
Squat using your hips as a hinge. Make sure your knees are not projecting forwards beyond your toes  
For increased difficulty, hold a weight

## Lunges (01:11)



Ensure knees and toes are aligned  
Make sure the knees do not overshoot the toes with each lunge

## Lateral bounding (01:48)



Focus on balance and control. Increase speed when feeling comfortable.

## Plank (02:25)



Maintain strength in your glutes, back, and abdominal muscles to prevent your back from arching

## Russian twist (03:04)



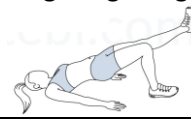
Rotation of the upper body should be above the navel  
Stability is maintained with abdominal muscles and legs  
For increased difficulty, use a weight (2 - 6kg)

## Week 2 Dying bug (00:29)



Ensure abdominal muscles are flexed, and your back is arched.  
To ensure your lower back does not touch the ground, maintaining a bridge with your upper back and buttocks  
For increased difficulty, increase the range of motion of your arms & legs

## Single leg bridge (01:17)



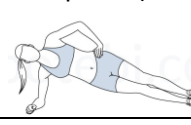
Focus on hamstrings and glutes  
Keep your back straight and pelvis level with the raised leg

## Bulgarian lunge (02:01)



Place one foot behind you on a chair/step  
Similar to the regular lunge, ensure knees are not overshooting toes and are aligned.

## Side plank (02:36)



Ensure shoulders are aligned, try to avoid rotation of the upper body.

## Pistol squat (03:14)



Squat level with the height of a chair  
30 seconds for each leg

**Week 3** Backwards lunge (00:10)

Similar form with normal lunge, but stepping backwards.



**Mountain climber (00:36)**

Maintain a straight back, perpendicular to the ground  
Try to avoid excessive hip movement, paying close attention to form.



**Overhead Squat press (01:13)**

Suggested 5kg+ weight ball or hand weights  
Similar form to squat  
Focus on abdominal and lower back strength to prevent overextension



**Plank with leg extension (02:10)**

Alternating leg extensions from plank  
Increase difficulty with leg raises/leg extension  
Increase difficulty by adding arms



**Tuck jump (02:37)**

Similar form to squats  
Increase difficulty by adding lateral jumping



**Week 4** Single leg balance (00:08)

Maintain tight core  
For added difficulty, stand on an unstable surface (i.e. folded towel, pillow), throw and catch ball with partner  
30 seconds each leg



**Lions (00:50)**

Lying prone with arms out straight in front of you. Draw arms to head with back extensions. For increased difficulty, lift your knees off the ground



**Up & Overs (01:38)**

While holding 2-4kg weight: lunge, rise lifting weight overhead, rotate and lunge to other side

**Side Planks (02:40)**

Ensure shoulders are aligned, avoid rotation of the upper body  
30 seconds – 1 minute for each side



**Lateral Lunges (03:33)**

Power up from side lunge activating gluteals and keeping core engaged



**Week 5** Bridges, with chair (00:15)

Engage core and glutes are engaged  
Ensure back is kept straight throughout the exercise, using the hips as a hinge



**Canadians (split lunge jump) (00:51)**

Feet shoulder width apart lunge, jump to alternate side lunge and back again  
For 30 seconds, then



**Mountain Climbers (01:22)**



For 30 seconds.

Maintain a straight back, perpendicular to the ground

Try to avoid excessive hip movement, paying close attention to form.

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**Russian Twists (01:49)**



For increased difficulty, hold a weight or fully extend your legs into the air

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**Burpees (02:33)**



Push up to plank, jump to squat, jump up

Engage back muscles to prevent slouching when jumping

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**Controlled tucks (03:13)**

In tuck, half squat position slowly extend, twist, mimicking skiing postures, follow the video

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