



Suggested Late-Fall Dryland Program

We believe you achieved remarkable growth during the Don't Just Ski RACE Fall Camp! As one of your coaches, I know I saw some marked improvement over the course of the two day training. The work you put in at the DJSR slalom camp will certainly benefit you as the ski season begins.

However, mastering technique is just one aspect of becoming a successful ski racer. The other, less enjoyable aspect is conditioning. Coach Henrik reminded us early Saturday morning that "there are only two things you can control: your attitude and your effort." While it's easy to enjoy the time on the slopes, maintaining that same level of effort off the hill is crucial. Conditioning is where your hard work truly pays off.

Numerous resources exist on effective off-season conditioning for ski racing, but this message serves as a reminder of its importance. Conditioning is crucial for developing into a strong racer. Here are a few workout ideas to enhance your training regimen or to integrate into your existing program as a multi-season athlete.

I structure my preparation for the ski season around three key components: Strength, Endurance, and Balance. Below are recommended exercises to enhance your capabilities in each area, along with a sample schedule as we approach winter.

Before embarking on any new fitness or training program, it is advisable to consult with a healthcare professional to confirm its suitability for your individual needs. For those unfamiliar with specific exercises, YouTube can serve as a valuable visual aid. However, some movements demand exact form, so it is wise to seek assistance from a coach or trainer to ensure proper execution. I will emphasize the exercises where correct form is essential for optimizing benefits and promoting long-term health.

Strength

Squats

Nothing beats the squat movement, period. This is your bread-and-butter. This can be front squats, back squats, back squats to a box, leg press machine, etc. This movement strengthens your ability to flex the ski, flex the boot and hold a stronger, more aggressive posture.



We are not trying to become linemen or olympic weightlifters here, but a strong squat is key. Under guidance, establish a 1- to 3-rep max, then use that as a baseline for your actual workouts via a load chart such as this one from the NSCA. If you don't have access to weights, go find some bricks, wrap them in duct tape, toss them in a backpack and start racking out air squats.

Form is important here, but easier to self-coach than in other movements, especially with a mirror. Keep that chest up, knees over your toes, and you'll do fine. Lift with a friend, they can help guide.

Hamstring curls

Imbalanced quadriceps and hamstrings can lead to injury. Therefore, if you squat, you must also work the hamstrings. My personal favorite is the hamstring curl machine, especially 1-legged. There is no hiding weakness doing one-legged hamstring curls. Minimize the bounce at the end of the rep, curl, 1-second hold, controlled release, pause under load at near extension for a half second, then rep again. DO NOT BOUNCE THE RETURN REP - that's cheating.

Deadlift

I love a good deadlift, but this move is not one I recommend with the intent of going heavy - there is too much risk. It is too easy to have poor form over multiple or too many high weight reps which will lead to injury (speaking from experience). I prefer deadlifts starting from the rack and then lowering down to the floor (rather than the traditional start from the floor), as this loads the muscles and tendons up as you move into the bottom of the deadlift, rather than starting from the toughest spot.

I much prefer reduced weight deadlifts in-between squat sets as a superset. If you decide to superset, start with 40-50% of your max squat weight and do sets of 10. Vary load from there to get the burn you want.

That said, my #1 favorite deadlift movement is <u>one legged RDLs</u> with dumbbells. Hits both balance and load in one movement, and can be used without weights for an outstanding hammie and lower back stretch. Also simulates a tuck on one ski... what's not to like?

Form is crucial for any of these variants. Please lift with a friend at minimum, and be evaluated on technique by a trainer if at all possible.

Bench

Skiing is a lower-body sport, but we do need to work the upper body... we are not looking for brute strength, but for injury prevention. I lost a season in college due to a dislocated shoulder and torn ligaments. I strongly believe that if I had worked my upper body more in that preseason, I would have been able to take the impact and not have



suffered that injury. Same approach as with squats, establish a 1- to 3-rep max, then use that as a baseline for your actual workouts.

Form is important to develop your maximum power and a partner is value added to get the bar off of you if you fail a lift. Rolling the bar down your chest and abs so you can situp and rerack is not fun, and can be dangerous if you go heavy - find a friend.

Pullups

Just like with the legs, if you push, you have to pull. If you can't do a proper strict pullup, get a <u>workout band off of Amazon</u>. Loop it around the bar and step in it to reduce the effective weight. Strict reps are tough and you should target proper form for max benefit.

Generally you should target reps to "failure;" failure being when you lose form. Kipping pullups are fine to start and have fun with but you don't get the same stimuli. I can rep 3x kipping what I can do strict, and my grip goes before my back and arms get tired. We are going for injury prevention, so load the muscles via strict, not the tendons in a kip.

Core

I saved this for last, but it's arguably the most bang-for-your-buck. Your core is the most important part of your body - don't ignore it. Injury prevention, agility, quickness, and power all improve with increasing core strength. This will be a part of every workout, and if you only have a few minutes to get one in - it will be the only part of your workout. You cannot ignore your core. Great movements are as follows:

- o Situps
- Crunches
- o Side crunches
- o V-ups
- Leg lifts
- o Number tracing with toes (lay on back, lift legs and "draw" the numbers in the air)
- Supermen
- o Planks
- Side planks
- Incline situps
- Medball Twists

I like to do 3 movements: one targeting centerline core, one oblique and then one back or hip flexor movement (e.g. 50 situps, 60s side planks each side, 20 supermen) then a round of push-ups. Then repeat with a second round of 3 new movements, then another round of pushups, then a final round of 3, finishing with a 2 min wall-sit.



Endurance

There are entire books, courses and professionals making a living discussing this topic. I will not go into it here and discuss the merits of 2:1 lactate intervals vs 3:1 tempo intervals. We are ski racers, not marathoners or members of the pro peloton.

That said, Ladies and Gentlemen, if you don't like running... sorry, you need to push through it and find your happy place on the pavement. If you get a minute into a GS down Chief at Okemo or Gauge at Sugarloaf and you're smoked, but you still have 10-15 seconds to go... you are guaranteed to be losing time in those final gates.

If you have knee issues or prefer the bike, then cycling is a great substitute, but your durations will need to go up, so plan accordingly. If you have access to a bike trainer or Peloton and can train to wattage output, phenomenal because you're going to get a wonderfully targeted workout (but it is not required).

And if you have access to one... you can also become very friendly with the stairmaster! You might laugh, but that is an amazing, low impact leg- and heart-busting workout. It's why hiking is such a great cross training activity for ski racing. Feel free to 1-up everyone by putting some weight (10-45#) in a backpack and climb until you're spent. It can be completed on the stairmaster, trail or a plyo box. (The yearly Chad is coming up in the Crossfit scene, and is a brutal but wonderful workout honoring a fallen serviceman - scale appropriately.)

Distilling it all down, train like you are going to run a 10k. Focus on heart rate zones, not pace. Short conditioning training should be 20-30 mins if you are running, 1 hr or less for cycling. Target Zone 3 to 4. Long conditioning training should approach 45 min to 1 hr for runs and 90 mins to 2 hrs for cycling, Zone 2, peaking at 3. If you want to go extra long, do it, but stay in Zone 2.

Balance

When I speak of balance, I not only speak of actual balance, but also of proprioception, and agility. This is something tough to envision on paper, but think of it this way: you're developing power in the strength training, but now you need to temper that raw power so it can be used properly. Think of how Tai Chi is done slowly. It's not practiced so one can fight, but to train the mind and body to do what you ask it to gracefully. This is your Tai Chi vs being a gym rat. These activities are best done with a partner and are generally fun.



• Jumps from Floor

Setup a Bosu Ball plastic side up. Do a two legged jump onto the ball landing in a near tuck. Then stand slowly to a 3-count and jump back off. Immediately jump back on.

• Jumps on Bosu

Setup a Bosu Ball with the plastic side on the floor. Single or double-legged hops onto the rubber side. Stand slowly on 3-count and jump back off. Immediately jump back on.

Standing Transverse Leg Extensions.

If you have access to a workout band (see pullups) or cable weights at the gym, put the strap or band around your ankle. Stand tangential to the direction of force with the strapped leg furthest away from the anchor point and the band or weights under load. Without rotation of your hips, pick up the strapped leg and cross your leg over the unstrapped leg (towards the weights). Once you hit maximum crossover, pull the leg back across until your leg is back to the starting position, and continue past until you hit maxim extension without hip rotation. Complete reps with your unstrapped leg both bent and straight.

Knee-boxing

Face your partner. Stand on one leg, raise the other with your knee bent. Your partner will place their hand in the air like a boxing mitt, and you have to tap their hand with your knee while balancing on the other leg.

Medball Catch

Stand on one leg, play catch with a medball with your partner. If you drop the ball or touch the ground, do 5 one-legged pushups.

Workouts

If you are not in a fall sport, time to hunker down. Start with lower volume, then ramp up as appropriate (e.g. weekly).



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Abs	Abs		Abs	Abs	Abs
Stretch	Short Endurance	Lower Body Lift	Long endurance	Upper body lift	Shooter's choice	Active recovery

I'm not going to prescribe exact sets, % of max and reps, etc. I don't know where you are in your fitness journey, nor am I present to modify the workouts as appropriate. You will need to self-evaluate and push yourself reasonably. Our target is fatigue, but not inability to move; and remember, any movement is better than doing nothing.

Shooters choice means to pick a workout style that you want to do, or feel you need extra in.

Note that active recovery is exactly what it sounds like. You don't get to sit on the couch. Go move. Work in the yard, ride your bike slowly through the park, go for a hike in the woods, etc. Flush your muscles of the metabolites remaining from the hard week, set yourself up for the day off on Sunday and the week ahead.

Lastly, if you've not been running, we need to ramp up slower than noted above. Skip the long endurance day, replace it with abs and then replace the shooter's choice with another short endurance.

If you are in a fall sport, consider what sport you are participating in and then feather in supplemental workouts that complement its weak spots. E.g. soccer players likely don't need to run but could use an increased focus on strength training. If you play football, work on your balance/agility and feather in more long runs. ...And everyone needs more abs.

- 3-4 days of Abs
- 1 day of strength, minimum
- 1 day of endurance, minimum

Disclaimer: Before starting any new fitness or training regimen, sit down with a medical professional to ensure that it's a good fit for you.

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