

Classic and Skate Skiing: What's the Difference?

By Coach Naimie

crosscountryskitechnique.com › classic-skiing
Guide to Classic Skiing – Cross Country Ski Technique

The 4 primary classic ski techniques, arranged on a power-speed continuum, like gears on a bike or car:

1. Herringbone.
2. Diagonal Stride.
3. Kick Double Pole (or One Step Double Pole)
4. Double Pole.



Classic Skiing:

- **Brief History:** Original form of cross-country skiing. Utilized for centuries in snow-covered regions for gathering food, gathering wood, and connecting communities
- **Movement:** Skis and feet are pointed in direction of travel, typically in parallel tracks. Propulsion is obtained by a repeated progression of pressing one ski down onto snow, swinging the second leg through, and then gliding on the second ski
- **Ski Characteristics:** designed to flex under 55-60% of skier weight and taller than skier, to facilitate kick and glide aspects of the technique; ski tip designed to keep ski in track
- **Pole Characteristics:** length limited to 83% of skier height, to facilitate arm swing that complements striding
- **Boot Characteristics:** Allow significant ankle and forefoot bending (aka flexion) at ankle and forefoot

crosscountryskitechnique.com › introduction-primary-skate-skiing-techn...
Introduction to the Primary Skate Skiing Techniques – Cross ...

The Five Primary Skate Techniques

1. **Diagonal Skate.** So the first technique on the spectrum is Diagonal Skate. ...
2. **Offset.** Instead, you'll use Offset to climb hills more efficiently. ...
3. **One Skate.** Next in the lineup, is One Skate. ...
4. **Two Skate.** Once you're moving too fast for One Skate i
5. **Free Skate.**



Skate Skiing:

- **Brief History:** Began as a modification to classic skiing at the world cup level in the 1980's. Grew in popularity as it was typically a much faster technique. Introduced as a specific technique at the world cup level in 1986 (as a way to "save the traditional technique" of classic skiing)
- **Movement:** Skis and feet are splayed outward and move side to side along a diagonal as the skier makes progress along the trail, typically over a groomed surface; Lower body movement is very similar to ice skating, hence the name
- **Ski Characteristics:** designed to flex under 115-130% of skier weight to facilitate the skis acting as springs, storing and returning energy with each stride; typically shorter than skier with a low profile ski tip, to enable efficient skating motion.
- **Pole Characteristics:** length approximately 90% of skier height, to facilitate more extensive and powerful arm swing that complements the technique
- **Boot Characteristics:** Provide significant ankle support and stability, with limited forefoot flexion