

SKIING TIPS FOR BEGINNERS.

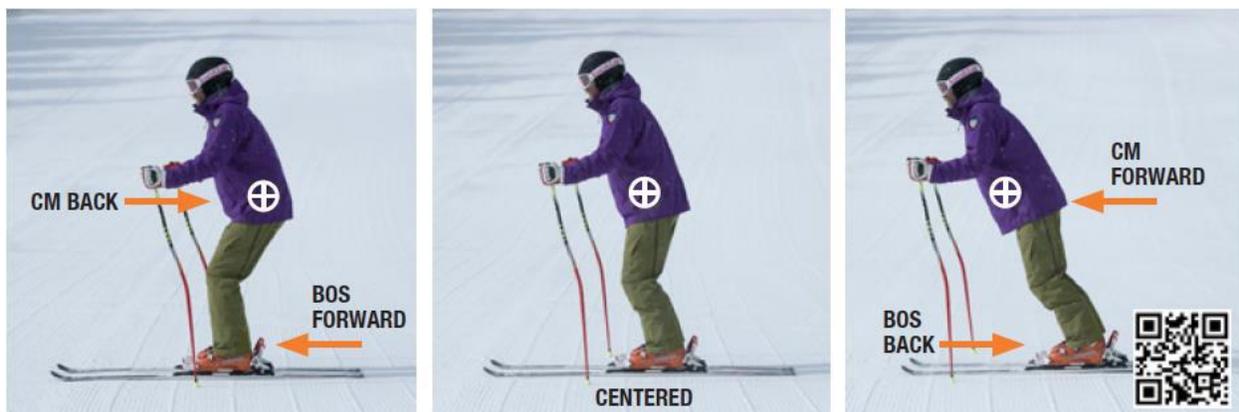
In this article we will continue building our technique of skiing on the snow. And as always, if you don't have an opportunity to go to the mountains, you are welcome to try the **Ski Simulator** by **SkyTechSport**. This will allow you to get the feel of manipulating your body in response to the real gravity of a downhill skiing. Both training methods of outdoor and indoor skiing also require the understanding of another basic element: the **pressure control**.

Pressure control requires movements to manipulate forces. It is those forces that affect the action of the skis on the snow. Pressure control has three distinct functions:

- control the distribution of pressure along the length of the ski
- control the distribution of pressure from ski to ski
- control the overall magnitude of pressure acting on the base and/or edge of the skis.

Controlling pressure along the length of the ski

Skiers primarily have three means of distributing pressure along the length of the ski, all of which require a forward or backward (i.e., fore or aft) adjustment between the skier's center of mass (CM) and his or her base of support (BOS). The CM is the central balance point of a person's body mass – basically, your center. You may move your CM forward or backward relative to the BOS or vice-versa, move BOS forward or backward underneath the CM. Both of these actions produce the same result by adjusting pressure forward or backward on the skis. A third and very effective approach combines these two actions, moving the CM and the BOS in opposite directions, allowing for a quicker adjustment in pressure along the skis. Take a look at the example below for a better visual understanding.



Moving the Center of Mass

Remember the Part 1 where you had to exercise shifting your weight in skiing boots? Here's how you can put it into action. Fore/aft movement of the CM is most effective when it originates and is controlled by flexing and extending the ankles. Flexing, or closing, the ankle joints can move the CM forward relative to the feet, moving pressure toward the tips of the skis. Extending, or opening, the ankle joints can move the CM back relative to the feet, moving pressure toward the waist or tail of the skis. As much as possible, the fore/aft movement of the CM and fore/aft adjustment of pressure should be controlled with the range of motion in the ankles first, and then complemented by movements in the rest of the body (knees, hips, and upper body).

- Flexing at the knee joint alone moves the CM backward. Extending at the knee joint moves the CM forward. This movement is much like sitting down and standing up from a chair.
- Flexing at the hip joint alone moves the CM forward. Extending at the hip joint moves the CM backward. This movement is much like bowling.

Controlling pressure from ski to ski

The ski that is farthest from the center of the turn's circle is referred to as the "outside" ski, and the ski closest to the center of the turn's circle is the "inside" ski. This "outside" and "inside" terminology also applies to the skier's legs in the turn sequence.

Turning is caused by force from the snow pushing on the skis. To maintain balance, the skier aligns the body to the outside ski. To turn and to link multiple turns, the skier actively directs pressure toward the new outside ski, while reducing pressure on the inside ski. This exchange allows the snow to push the ski in the new direction. So basically, when moving to the right, the ski on the LEFT is the OUTSIDE SKI. Conversely, when moving to the left, the RIGHT ski constitutes the OUTSIDE SKI.

This transfer of pressure and balance from one ski to the other is one of the most fundamental aspects of alpine skiing. To accomplish this, the skier must move the CM toward the inside of each turn and direct his or her balance toward the outside ski. Through this transition, the distribution of pressure from ski to ski may range from a complete transfer – in which 100 percent of the force is directed toward the outside ski – or a partial transfer with only slightly more pressure directed toward the outside ski. This fundamental movement is very natural to your body to maintain balance. As in, if you were to fall to your right, you would try to shift your weight to the left to counterbalance, right? Now, All you have to do is put to work this familiar feeling and learn to use it for skiing.

Extension and flexion of both legs



A skier can extend or flex both legs through the transition from one turn to the next. There's a difference in speed between extension/ flexion of outside and inside legs. Common in medium and long turns, the weight transfer can happen gradually or quickly since the skier has control over the amount, direction, and rate of extension. This is just a general example of how a skier transfers pressure from ski to ski, or shifts weight, involves similar mechanics. A slightly different intensity, rate, and/or timing of weight shift occur. Generally, a combination of different examples is used on a given run depending on tactics, conditions and/or intent.

Overall, as any other habit or sport, skiing requires practice and consistence. The most awkward moves in time will become easier and will feel lighter. As your body adjusts to spastic pressure of moving up and down, side to side, your building muscles will get stronger and more enduring. It is ok to make mistakes and fall over and over again. There is not a single professional who can avoid that. So, give yourself a break if in the beginning you struggle a little. Just trust your body, trust your instructor. Make a decision that benefits you in multiple ways and set up a regular time for practice. Even 10 minutes a day will end up in a decent number of hours over a year. And if you stick with it long enough, sooner or later **you will end up at the top of the mountain** – literally.

We'd like to conclude our Introductory Course and Tips for Skiing Beginners on this positive note. You are welcome to revise previous parts here: [\(link to part 1\)](#), and [\(link to part 2\)](#). Feel free to browse through www.SkyTechSport.com for more information and guidance. If you liked this set of articles, we have more in store for you. Any time you feel confident to move forward, we'll be waiting for you with another set of tips, techniques and practice guides for intermediate and advanced level skiers, including instructional videos of how to work with the [Ski Simulator by SkyTechSport](#).

See you in the next chapter!

VOCABULARY

Base of support (BOS): The location of a skier's weight on the snow.

Center of mass (CM): The central balance point of a person's body mass. Also known as the center of gravity.

Extend: To make longer; to stretch or open, e.g., extend a joint.

Extension: Any movement that increases (i.e., opens) the angle (as expressed in degrees) of a joint. At times, the skier extends the knee, hip, and ankle joints simultaneously.

Flexion: Any movement that decreases (i.e., closes) the angle (as expressed in degrees) of a joint. Often, this entails bending the knee, hip, and ankle joints simultaneously.

Fundamental movements: An umbrella term for how skiers move. These movements include flexion/extension and rotation; and specific references such as inversion/eversion, supination/pronation, and adduction/abduction.

Inside ski: Considering a turn as part of a circle, the ski that is closest to the center of the circle is the inside ski of the turn.

Outside ski: Considering a turn as part of a circle, the ski that is farthest from the center of the circle is the outside ski of the turn.

Pressure: The amount of force distributed over a given area.

Pressure control: The skill of managing forces acting on the skis. Skiers manage the distribution of pressure along the length of the ski(s), transfer pressure from one ski to the other, and adjust the overall magnitude of the forces acting on the skis.