

# SKI FOR LIGHT, INC.

## GUIDE HANDBOOK

2014-15 EDITION

*"Having a guide to ski with is an incredible and beautiful gift. I feel **free** again."*

—Chris Leghorn,  
visually impaired skier



*Chris Leghorn (left) with guide trainer Jim Steele at SFL 2014 in Anchorage.*

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We would like you to know that this guide training handbook is just that: a resource for training guides for visually and mobility-impaired skiers. Ski for Light, Inc. makes no representations or warranties regarding the content herein, nor does Ski for Light, Inc. assume any liability for such content. The sport of cross-country skiing is an active and occasionally hazardous activity, and is assumed at your own risk.

# INTRODUCTION

**W**elcome to Ski for Light! We hope you're ready for an experience like no other—and we trust you will find it rewarding and enjoyable.

As a guide, you have an opportunity to share your love of cross-country skiing and the outdoors with a blind or visually impaired person. In the beginning you may assume that you're here to do something for another person. You'll soon discover that Ski for Light is about doing something *with* another person, who just happens to be blind. This shared partnership is at the heart of our program, as it has been since the very first American Ski for Light in 1975.

This handbook is one of many aspects of the program that have evolved over the years, as participants and guides have figured out better ways of working together. We hope you'll spend some time with it before attending your first event, hold onto it as a reference during your training, and refer to it whenever the guiding role presents you with a new challenge.

Keep in mind that this handbook focuses on the basics of guiding blind or visually impaired skiers (“participants” or “VIPs” in Ski for Light lingo); there's other information related to guiding mobility-impaired skiers (or as we like to say, “MIPs”). And of course there are many other valuable resources available to you, including online instructional articles and videos, your guide trainers, guide-trainer coordinators, and other participants in the SFL program. All of us were once first-timers, and there's nothing we like better than helping out the new folks and turning them into “lifers” like us.

## Our history and philosophy

The idea of teaching blind people to cross-country ski began in Norway in the 1950s, with a blind Norwegian musician named Erling Stordahl. His work led in 1964 to the creation of the Ridderrenn, which today annually attracts more than eight hundred disabled participants and guides from around the world to the mountains of Norway for a weeklong event. In 1975, the Ridderrenn concept was brought to Summit County, Colorado, through the efforts of Olav Pedersen and with the support and involvement of Erling, the Sons of Norway Foundation, the Summit County Lions Club, and many others. Olav was at the time a ski instructor in Colorado and had emigrated from Norway a decade earlier.

Ski for Light has always honored its Norwegian roots. Each year, a group of skiers and guides from Norway attend our international event, and a group from Ski for Light travels to Norway for the Ridderrenn. You'll find more on the evolution of Ski for Light, in this country and around the world, at [www.sfl.org](http://www.sfl.org).

Wherever it takes place, Ski for Light is built on partnerships that challenge the physical and intellectual capabilities of each program participant. On the snow, this philosophy is exemplified by the shared accomplishments of the blind or mobility-impaired participant and a sighted guide. Off the snow, it is evident in a wide variety of social activities and in all aspects of SFL's management and governance. In short, we all rely on each other to make the program happen, and most of us return home feeling that we have gained much more than we have given.

*Skiing, sharing,  
and learning.  
The mission of  
Ski for Light is  
to enhance the  
quality of life and  
independence  
of visually and  
mobility impaired  
adults through  
a program of  
cross-country  
skiing.*

## Role of the guide

Participants attending Ski for Light come from throughout the United States and from several foreign countries, and have many different skill levels. As a guide, your primary responsibility is to provide information and make decisions, while moving across the snow, that will lead to a safe and enjoyable experience for both you and a blind skier. (We use the term “blind,” by the way, to denote any level of visual impairment, from partial sightedness to total blindness—and finding out where your own skiing partner falls in that wide range, under various conditions, will be one of your first tasks as a guide.) Through the guide-training program that begins your first week with us, technique sessions offered during the event itself, and consultation with experienced guides and skiers, you’ll learn how to carry out this responsibility with confidence. During the many non-skiing activities, your role will vary, and the assistance you provide will probably diminish over the course of the week. For example, during the early part of the week, your skiing partner may need more assistance getting around the hotel than later in the week, as he gains familiarity with the environment.

Remember that you are not on duty around the clock. Experience has taught us that honest and direct communication generally leads to an enjoyable and mutually beneficial partnership for both participants and guides, on and off the snow. When in doubt about the level of assistance that is needed, just ask.

## Guide training

Your guiding experience will begin on the Saturday evening before Ski for Light Week officially kicks off. All first- and second-year guides participate in guide training—sort of a two-day



boot camp, with better food and fewer push-ups—and more experienced guides may also return to take advantage of this opportunity to refine their guiding skills.

Participants in guide training are divided into small groups, typically five or six trainees and two guide trainers. These guide trainers, one an experienced guide and one an experienced blind skier, will be your first resource for information, support, and problem-solving throughout the week.

During meetings on Saturday night, you will begin to learn the SFL vocabulary and will receive basic information that will help you feel more comfortable interacting with blind and visually impaired folks. These sessions will also cover important aspects of guiding that you and your skier should discuss prior to going outdoors, such as setting goals for the week, getting familiar



with the skiing equipment, making sure to dress properly for the day's conditions, and settling on some terminology to use in guiding.

You will spend most of the day on Sunday out at the ski area with your guide-training group, learning proven methods and techniques to safely guide a blind person over a wide variety of terrain. These techniques are described in detail in later chapters of this handbook.

One of the most meaningful and fun parts of your guide training will be the opportunity to ski with a guide while wearing a blindfold. This experience is not intended to simulate the experience of a blind skier; while you may be putting on a blindfold for the first time, most of the blind participants at SFL have had years of experience as a blind person and some training in orientation and mobility. However, skiing with a blindfold will help you understand the need for precise directions, the challenges of balance, and the level of trust required for a successful experience for both skier and guide.

After dinner on Sunday evening, every guide is matched with his or her skier for the week. Beginning guides are usually matched with experienced skiers, but this is not always possible. Other considerations that go into the matching are age, size, and fitness level; we do our best to make the pairings compatible. Once all the introductions are made, you'll have a chance to seek your skier

out and have a conversation before heading to your room to rest up for the first day out on the snow.

It is normal for the guide and skier to feel some anxiety as they begin this adventure. Much of this anxiety can be relieved by simply getting to know one another and sharing your expectations for the week. Don't hesitate to raise questions about vision. Most participants are very comfortable talking about their blindness or visual impairment. While some participants are totally blind, many others have some remaining vision ranging from light perception to the ability to read large print. Glare and other changing conditions may also affect someone's ability to use their vision, indoors or out. For participants with some vision, the ability to see the tracks, follow a guide, or detect objects will influence how you guide. Your conversation on Sunday evening should also include a discussion of any health-related conditions that might affect skiing.

Throughout the week, your development as a guide will continue with feedback from your skier, and through formal and informal meetings with guide trainers, other guides, and VIPs. A number of technique sessions focusing on specific skills will also be offered to participants and guides. We are eager to share information and experiences to help you become an expert guide.

*New guides  
in training  
with Maya  
Jonas and Jim  
Steele, at the  
2014 event in  
Anchorage.*



# GUIDING BASICS

If you have limited or no experience interacting with individuals who are blind or visually impaired, you probably have many questions about what you should or should not do or say. The brief answer to this question is: relax, be yourself, speak in a normal voice (louder when guiding on the trails), and ask questions when you are in doubt. While it is important to be aware of someone's blindness, remember that it's only one characteristic of a person's make-up. During your guide training, interactions with the blind participants serving as trainers should help you feel less anxious about meeting and guiding your blind skier.

The amount of vision, if any, and the way that individuals use their vision will vary from person to person. Individuals also differ in their level of fitness, desire to take risks, athleticism, age, and the length of time that they have been blind or visually impaired. These and other individual traits will affect your approach to guiding. As you and your skiing partner become familiar with one another and experiment with language and guiding techniques, you will probably develop your own adaptations to the material presented in this handbook.

Here are some basic communication tips that will apply throughout the SFL week:

- If you are inclined to offer assistance to a VIP, be sure to ask first: "May I offer some assistance?" or "Can I be of help?" Don't automatically assume that a blind person walking alone needs assistance, but don't hesitate to inquire.
- When starting a conversation with a blind person, it's helpful to share your name (you'll notice that we often use full names at Ski for Light—"This is Bob Smith from Toronto"—both to avoid confusion and to assist in remembering people we've met). You might also give the blind person a light touch on the hand or arm. Similarly,

when ending a conversation or walking away, especially in a small-group setting or while at the dining table, it is polite to mention that you are leaving.

- The appropriate way to guide a blind person off the snow is to allow him or her to take your arm just above the elbow. This allows the blind person to follow you and interpret many cues from your movements, such as going up or down steps. However, because we will be in an unfamiliar environment, some participants may prefer that you also let them know when you are approaching stairs and whether the steps are going up or down. As with all aspects of guiding, both on and off the trails, clear and open communication is the key to a high level of comfort for all concerned.

## Orientation and mobility

"Orientation and mobility" refers to a blind person's awareness of his/her environment and ability to travel safely and efficiently. Through conversation and observation you will gain a great deal of knowledge about an individual's orientation and mobility skills, which vary widely among individuals. Competence in orientation and confidence in one's mobility have a direct impact on each person's skiing experience.

Some participants will use a cane as a travel aid while others will use a guide dog. This choice is strictly an individual decision based on a variety of factors and preferences related to travel needs. You will learn how to interact with guide dogs during the week, including how to tell when a guide dog is "on duty" or "off duty," not to pet or otherwise distract a guide dog that is on duty, and how to ask an owner about petting the dog.

A keen awareness of distance, direction, and timing is central to developing good orientation skills. For the blind person, orientation occurs through the use of senses other than sight. Staying

## Emergency quick stop

The most important word in the skier/guide vocabulary is “sit.” This is the emergency quick stop command. It must be issued with authority and executed without question or hesitation. If a hazard lies ahead that may not be negotiated, or if an unanticipated situation arises, the guide yells “Sit!,” and the skier drops down immediately. Preferably the skier should sit and fall over onto his hip and thigh, to the outside of the double-lane tracks, where a collision with others is less likely. The skier should try to keep his arms and poles down and slightly behind the body. But the most important thing is for the skier to go down immediately. The skier should initiate this technique himself, if he feels he is skiing out of control or otherwise in danger. It is critical for the guide and skier to discuss the sit command and practice it on the snow prior to encountering an emergency—if possible, within the first hour of skiing together.

oriented requires an exertion of mental effort.

For this reason, even a person with well-developed orientation skills may, if new on skis, find the combination of learning new physical motions, new body positions, and experiencing a new environment quite difficult at first. If you, as a guide, can be aware of the skier’s comfort level, especially the first day on the trails, you’ll be able to tailor your teaching to the pace at which your skier can learn. You cannot teach good orientation skills in a week. Therefore, you’ll need to identify what cues the skier is accustomed to using and adjust your approach accordingly. The best way to learn how the blind person uses cues is to ask.

## Basic approach to guiding on skis

At SFL events, two sets of tracks are usually groomed at a consistent width apart, so that two skiers may comfortably ski side-by-side in easy voice communication, but not so close as to interfere with poling. The guide’s position with

respect to the skier will depend on the terrain and on the skier’s visual impairment.

In most situations, the guide skis alongside the blind skier, with the guide in the left-lane tracks and the skier in the right-lane tracks. Here the guide has good voice and eye contact and can make physical contact if necessary.

If the skier has partial sight, she may prefer to follow behind the guide in the same set of tracks or slightly behind in the adjacent track. For example, a skier with some light perception may find that the contrast between guide and snow makes identifying terrain changes easier and therefore will prefer following the guide. This is especially true on hilly terrain and where the tracks are not reliable. Sound in front of the skier can also be helpful. The guide’s voice, the sounds of skis gliding, or even a small bell attached to the guide are practical ways to direct the skier’s movement. However, guiding a skier who’s several feet or more behind you can limit visual, physical, and voice contact—and you’re often looking back at your skier over one shoulder, taking your eyes off the tracks ahead, which can compromise safety.

On the other hand, some partially sighted skiers prefer to ski in front of the guide to increase their independence. Although the guide can easily watch the skier and give instruction, your view of what lies ahead is limited.

Although side-by-side skiing is most common at SFL, you may find yourself skiing in front of or behind your skier under various circumstances, and you should become comfortable guiding from any position.

## Trail etiquette

If you stop in the tracks, whether to take a look around, adjust clothes, catch your breath, or just chat with your partner, please remember to step out of the tracks. Make this instinctive! It becomes easy to neglect this courtesy, particularly when no one is behind—but just when you think of looking, someone is already there, being held up.

Please be conscientious, too, of how you treat the natural surroundings. Don’t discard tissue, candy wrappers, the strips of tin from your wax containers, etc. in the snow. Please pack out what you skied in with and pick up any litter or lost items found on the trail. The significant numbers



of people using the same trails can easily “trash out” an area if we are not considerate.

## Basic commands

There are many ways to describe technique, track conditions, directions of travel, and nature’s wonders. Also, the language used from touring to racing may vary due to the change of pace. Common to all situations is the use of clear, concise, and consistent vocabulary. In addition, don’t forget to allow time to enjoy skiing in silence. For example, you might occasionally say, “Here is a long straightaway for the next minute or so; let’s just ski and enjoy the silence and sounds of our skis.”

The importance of the language used by a guide cannot be overemphasized. Does a “small hill” mean a “short hill” or a “shallow hill”? A few tips:

- Give simple and concise instructions.

- Use language you both can understand.
- Develop a set of commands that work for you and your skier, and stick with them throughout the week.
- Do not over-guide with extraneous information.
- Never say “right” when you mean “left” or “correct.” (This is harder than it sounds!)
- Provide the skier as much independence as is possible and prudent.

## Directional cues

Where the tracks are good, the more experienced skier will generally adjust automatically to gentle curves, but directions such as “curving left” or “sharp right” may be appropriate. On long curves, it is useful to say, “Halfway through, keep curving right.”

More specific directions are needed getting into and out of the tracks and when the condition



of the tracks is poor. Beginner skiers will generally require more directional information. Standard SFL directional commands include:

- “Step right” or “Step left.” The skier sidesteps to the right or left, keeping the skis parallel to each other.

- “Tips left” or “Tips right.” The skier widens the tips of skis to the left or right, one after the other.

- “Tips 10 o’clock” or “Tips 2 o’clock.” The skier turns the tips of both skis to the left or right based on 12 o’clock being straight ahead.

- “Turn left 90 degrees” or “Turn right 180 degrees,” using degrees of a circle.

- “Edge left” or “Edge right” lets the skier know you are crossing a slope and to turn the ski edges into the slope.

- “Bend your knees,” i.e., prepare for a dip or bump in the terrain.

- “Leveling out” or “Almost flat” is very important to say near the bottom of a hill so the skier can adjust body position accordingly.

If you use non-SFL-standard terms such as “veer right” or “swing right,” be sure that you and your skier have agreed on what these words mean.

## Grade and track conditions

Here are some phrases you might use to describe track conditions and directions succinctly:

- “Short, straight downhill”
- “Long, gradual curve to the left”
- “Left track good” (right track is washed out)
- “Steep uphill in fifty feet”
- “Shallow dip” (short downhill with immediate uphill)
- “Small hump” (little uphill followed by small downhill)
- “Straight ahead and flat for a hundred yards.”
- “Fifty-yard gentle downhill starting in five yards... Beginning now.”

On either short or long uphill, it can be useful for pacing one’s skier to say “halfway” and “twenty more strides” or similar.

You can use a number system to describe

steepness of up or down hills, such as “up 1,” “up 2,” or “up 3.” Combining several commands in series over a rolling section of track might sound like this: “Up 1.... now transitioning to up 2.... we’re halfway... now leveling out on top. Flat for twenty yards.... now down 2, and you can double-pole down this straight hill with a good run-out.”

Over the course of the week, guide/skier pairs will become familiar with each section of the 5K or 10K trail they are skiing. This gives you an opportunity to use shortcut commands for certain sections, such as, “Here’s our first herringbone hill.... start now.” Or, “Here’s our favorite long, gently undulating section, so let’s lengthen out our glide and focus on good weight shift from ski to ski.”

These examples, along with suggestions from other skiers and guides, will help you and your partner develop your own vocabulary.

## Timing and transitions

The timing of information given and the judging of distance are very important. Information shared early enough allows the skier to decide which technique to use—but if

information is provided too early, the skier may not know when to anticipate the change and can be confused when what they feel now is different from what you described.

Using agreed-upon measurements of distance or time prepares the skier for upcoming changes in the terrain. Distance measured in feet, meters, or yards may work for different people. Timing can be indicated in seconds, such as “herringbone in ten seconds,” or by use of a count-down system to prepare for more abrupt changes, such as, “Curve sharply right in 3... 2... 1.”

A smooth transition from one technique to another is important for maintaining flow and forward momentum as the grade changes. Even on gentle terrain, the guide needs to describe what is ahead. Things to point out include:

- Curves in the track and whether they are to the left or the right, gentle or sharp.
- Upcoming changes in the grade from flat to gentle or moderate ups and downs.

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- Humps or dips in the trail.
- The condition of the tracks (good, icy, washed out, etc.).

- Upcoming traffic or people you may be passing, even if they are out of the track.

Once you get to know your skier you should be able to better describe the grade changes by suggesting what technique might be appropriate ahead. Examples:

- “It’s getting flatter ahead; I think you can double-pole or kick double-pole.”
- “We are starting to go up a gentle hill. You can go back to the diagonal stride.”
- “The uphill is getting steeper, so shorten your steps and shift your weight quickly from one ski to the other.”
- “We will be going down a gentle but long hill. Maybe stop striding and ride in the tracks with your knees bent and loose.”
- “This downhill is a little steeper; you may have to use your half-snowplow.”
- “We are approaching a very short rise. Pick up some speed and you can diagonal stride right on up it.”

Except for steep up and down hills, where safety may be an issue, these should be suggestions rather than commands. We try not to insist that skiers use a particular technique. They know their abilities and energy levels best. Once they feel the terrain, they should be able to select the proper technique for the moment.

Finally, be sure to congratulate your skier (and yourself) after a good transition. Integrating all these various skills and guiding commands into seamless skiing over shifting terrain—that doesn’t come easily for most pairs, but when it happens, particularly on a section of trail that has held you up before, the success can be exhilarating. Enjoy it, and then keep on skiing!

## Passing procedure

Throughout the week, you will be passing or being passed by others. You should avoid passing on steep hills where there are no tracks. Well set,

double-lane tracks on flats work well for passing if we observe a few consistent rules.

First, the guide skis in the left-lane tracks and the skier in the right-lane tracks. For the guide and skier who want to pass others, the skier must cross from the right lane to the left and be in front of the guide. The guide shouts “Track!” in plenty of time to allow the guide ahead of them to move behind his/her skier. After passing, the guide must make sure the skier is far enough ahead to avoid any conflict with the skier just passed, and then may instruct the skier to move back into the right

lane. Both guides and skiers should be careful to keep poles close to their sides when passing to avoid hang-ups.

If you are being passed, it is the responsibility of those passing you to announce their approach and intent by yelling “Track!” As guide, you must then cross over from the left lane to the right lane, skiing behind your skier. Doing this allows you to always see your skier and project your voice.

Whenever the passing lane (left-lane track) is congested ahead, passing should not be attempted unless the guide and skier are capable of leaving the tracks completely and making their own route around the congestion.

Remember, all passing is done on the left, and the slower skier has the right-of-way.

The procedure is slightly different when one of the pairs involved in passing is a MIP pair. The MIP skier always uses the left-lane tracks, with MIP guides typically using the right; lane-changing is especially difficult in a sit-ski, so a fast MIP skier and his or her guide will both use the left-hand tracks to pass, and the slower VIP pair will have to stay to the right. In the case of a slower MIP pair, the VIP pair may pass on the right—but again, make sure there is plenty of clearance before attempting to re-enter the left-hand track ahead of a MIP. A sit-skier’s speed can change drastically, even on a modest incline or decline. For the same reason, a guide should regularly check over his or her shoulder for fast-approaching MIPs in the left-hand lane, while being aware of oncoming traffic from all directions. If it’s necessary to clear the tracks completely for safety, don’t hesitate to do so.

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# PROGRESSION OF INSTRUCTION

The material in this chapter is intended for guides teaching beginner skiers or novice skiers who have not skied since the previous season. (Remember, most first-time guides are assigned more experienced skiers, which is why we've organized this handbook with more general guiding commands first—chances are, you won't have to begin your first week at Ski for Light by teaching someone how to ski.) However, all levels of skiers will benefit from a review of these skills at the outset of each SFL week.

You'll get a better handle on this progression during guide training and through various instructional opportunities during the week. The final Ski Instruction Summary section, included as an appendix here for review purposes, will also be made available as a nametag insert, for field use.

## Indoor introductory session

For novice skiers, including those who only ski once or twice a year, an indoor session in a carpeted room adjacent to a large hallway provides

an excellent opportunity to introduce or review all beginning ski skills. The indoor session described here is comprehensive. Depending on your skier's previous experience and physical abilities, you may shorten these exercises and/or perform some of them outdoors.

The guide should not have on skis or poles during indoor sessions. Instead, be available to stand beside the skier, kneel on the floor to correct ski position, or otherwise assist. Skiers should bring their skis, poles, and boots to this session. Poles will be kept on the side of the room, except when learning to fall down and get back up. It is important for skiers to learn balance, stepping, and striding movements without poles. Explain that poles are used for propulsion, not for balance, and thus are unnecessary for the indoor session, except when practicing to get up after a fall.

**1. Put skis on.** (No poles!) Make sure your skier understands how the bindings work with her boots and can put on and take off skis indoors.

**2. Balance skills.** Have your skier stand with skis parallel, about the same distance apart as in the tracks.

Make sure skis are exactly parallel so the skier learns muscle memory of parallel skis. (This is not obvious if you can't see your skis, especially if you have any natural twist in the hips or knees or ankles that cause the feet to point anywhere but straight ahead. Be very strict about learning to get in an exact parallel stance, and make micro



adjustments to the skier's skis until she can do it on her own each time.) Kneel down to place the skis in correct position, or use two index fingers as a tactile illustration to show whether the skis are in fact parallel, slightly "V"ed or crossed.

- Bend and straighten knees/ankles. Practice bending both knees and ankles to lower one's center of gravity; feel the hips sink down without bending at the waist. Straighten up and sink down several times in a row. The skier should remain facing forward, not looking downward.

- Balance on one ski. With knees slightly bent, shift weight to one ski and lift the other a few inches off ground. Place that ski back down in perfect parallel position, then shift weight to it and lift the other ski. Repeat several times, until your skier can balance for several seconds on one ski.

- Lift and turn one ski. Lift one ski a few inches off the ground and turn that foot left and right. Replace the ski on the ground parallel to the other ski. Then lift the same ski and place it down with its tip crossed on top of the other tip. The skier should now feel that the skis are not parallel and that the tips are crossed. Re-lift the ski and place it parallel to the other. Repeat by crossing the tails. Repeat with both skis.

### **3. Side stepping.**

- Basic side step. Lift one ski up, then move it out sideways, and place it down parallel with the other. Then pick up this same ski and bring back to its original position. Repeat with a wider stance. Repeat with the other ski. Then move three side steps left, and three side steps back to the right.

- Side step lunge. This is an important drill for gaining confidence and to prevent falling over. After the skier demonstrates good side stepping, tell the skier to pretend she is falling sideways to the right. She starts to lean her upper body to the right and then quickly moves the right ski over to prevent falling. Repeat several times until the skier can take a wide side step and land with a bent leg, as she leans and "falls" to the right, thus catching herself. Repeat to the left.

This is an essential skill to practice indoors and outside. The ability to catch oneself by quickly lifting a ski out of the track and into a stable wide stance will prevent many falls and will also help

with moving one ski out of the track and quickly into a half-snowplow position. Make sure your skier can catch herself to the right and left, without poles, and return to this exercise at the end of the indoor session. Watch her balance and confidence grow!

**4. Falling down/recovery practice.** Before proceeding with further indoor skills, explain that she needs to know how to get up if she falls down with skis on. Hand out poles and show how to put on the straps.

- Don't fall down yet! Start with the second half of getting up. Have the skier plant her poles in front for balance and then slide one ski forward until she is kneeling on one knee, with the other leg bent ninety degrees. She should be able to balance and rest in this position, and then come back up to standing. Repeat, and then do two

times with the other leg forward. This will show her the position she is aiming for after getting up from a fall, and how to stand from that halfway-up position.

- Now get back into the same lunge position, with one knee down on the ski. This time have her tip over onto her hip into a controlled fall. If she has her left knee down, she

can put her left hand on the ground and slowly lower herself onto the ground, with her body to the left of both skis. On an indoor surface this needs to be a slow, controlled "fall" to the ground. Do not let people just tip over.

- If on her left side, she slides her right ski forward until the knee is at ninety degrees. She then uses her left hand to roll back up to kneeling over the left ski so she is back into the familiar position of the lunge practices above. She then plants her poles in front of herself and stands up. Repeat on the other side.

- If your skier has a problem rolling up onto her knee, have her release the binding on that ski (of the leg that is underneath her), and have her experience how easy it is to get up. It is fine to take off one (or both) skis after a fall.

**5. Emergency quick stop.** Explain the "Sit!" command and its use as an emergency stop (see sidebar on page 6). Practice indoors, using the

*The ability to catch oneself by quickly lifting a ski out of the track and into a stable wide stance will prevent many falls.*



same controlled fall to the side as done above, so that the skier understands what to do when she hears the one-word command, “Sit!”

Save other getting-up tips and practice, such as lying on your back to get skis back in line after a bad fall, until the first session on the snow.

### **6. Turning in place** (poles off again).

- **Tips left/tips right.** Have the skier step into a narrow “V” or herringbone position, by moving his left tip out to the left. Lift and place the right ski parallel to that ski. Repeat this two-step sequence until the skier has turned ninety degrees to the left. Then turn back to the right by moving tips right. Have the skier take several small steps versus a few wide steps. (This exercise is important not only for turning in place, but to help the skier get comfortable turning his skis and learning the herringbone stance for going uphill.)

- **Tails left/tails right.** Less commonly, a skier will turn in place by first moving the tail of one ski out into a narrow wedge, or snowplow, position. Have her try ninety-degree turns this way to the left and to the right. (This is also good practice for learning the essential skills of half- and full-snowplow positions.)

- **Emphasize** that the skier will frequently use either the narrow snowplow or the “V” position (tails or tips slightly apart) to keep from sliding forward or backward. Therefore these are important positions to learn not only for turning around, but also for standing still.

### **7. Snowplow position.**

- **Half-snowplow.** Now, the skier can use the same skill used for “turn around the tips” to get into a half-snowplow position, by stepping out with either ski while keeping the other ski under the body. Have him do a narrow half-snowplow and then a wider one, on each side, always returning to parallel. Next have the skier slowly step into a narrow half snowplow and then spread or push the tail of the ski out into a wider snowplow, without lifting it off the carpet. He should use the heel of his boot and the back half of the ski as if he is spreading butter under the ski out across the snow. The skier should then lift up and bring the ski back into the half-plow position and then spread it back out wider again.

Repeat on each side, until the skier can confidently step into a perfect half-plow with tips just a few inches apart, knees and ankles flexed,

body upright, and weight distributed more on the ski underfoot and less on the ski in the half-plow. He should be able to spread or push the ski into a wider stance and then pick it back up and bring back to parallel. Spend several minutes on this drill. This is the position to use in any situation in which the skier wants to control his speed going downhill in the tracks or anytime he wants to slow down or come to a gradual stop.

- **Full snowplow.** Have the skier place his right ski and then his left ski into the snowplow position. He should bend his knees and ankles to sink his hips down, while maintaining an upright body position and looking straight ahead. Go back into the upright parallel position, then hop into a full snowplow, and hop back parallel. Repeat several times—first narrow, then slightly wider. Then, get into full snowplow by barely hopping the tails wide but mostly spreading them wider. The slight hopping is to unweight the skis on the carpet, so they can both spread at the same time into the snowplow.

This motion—keeping the tips together and spreading the tails into a narrow or wide half-plow or full snowplow—is the fundamental skill needed for maintaining and controlling speed while gliding or turning. Emphasize mastery of these skills with novice and even intermediate skiers, while indoors on a carpet and without poles.

- **8. Herringbone.** As in “turn around the tails,” have your skier get into a half- and then a full herringbone position—first narrow and then wide. As with the snowplow, her hips should sink down from bending her knees and ankles, but not her waist. This will be the position for going up steeper hills. Emphasize that the body must be upright, with head up and facing ahead.

- **9. Edging skis in the snowplow and herringbone positions.** This is a good time to introduce the feel of an edged ski versus a flat ski. While he is in the snowplow position, point out that his skis are flat on the carpet. Now, have the skier put both skis on their inside edges by bringing his knees slightly together. This is easier in a wider snowplow stance. Go back and forth from flat to edged skis. Repeat the same sequence in the herringbone position. Being able to control whether one’s skis are flat or edged is an important skill on the snow, whether you are going uphill, downhill, or side-stepping.

All these basic skills can be introduced and practiced indoors, saving many confidence-killing falls the first day, preserving the skier and guide's energy (and warmth) for subsequent work outdoors, and building a foundation of success for the rest of the week. If the skier is having any problems, review each of the above skills before moving on.

## First time on snow

First-time skiers, as well as novices who have not been skiing yet this year, should be taken through the skills described in detail above outdoors on the snow. Most skiers are eager to get out on the trails as quickly as possible—and we certainly don't want to hamper that enthusiasm—but time spent in a practice area reviewing these basic skills is never wasted, even with the most accomplished

skiers. Working through some simple stepping exercises and taking a practice fall or two makes a good warm-up and can help you as a new guide ease into your role, away from other pairs.

### **1. Carry skis and poles to a flat, uncongested area for beginner practice.**

Guides may find it easier to start this session with their skis off, so they can directly assist their skier.

### **2. Review stationary skills** (without poles).

Balance on one ski; side-step; side-step lunge. Do 180-degree turns, first moving tips left or right through the "V" position, then moving tails left or right through the snowplow position.

**3. Fall/recovery.** Repeat the indoor procedure of falling to the side and getting back up on one knee with the other leg forward at a right angle. Also, get up by taking one ski off (the ski that is directly under the skier). Demonstrate how to untangle from an uncontrolled fall by lying on





your back to sort out skis and poles before getting back up.

#### **4. Review the half- and full snowplows.**

Practice spreading skis from a narrow to a wide plow, while stationary on flat ground, outside of the tracks.

**5. Edging.** Practice edging skis in the snow, while side stepping from a firm, edged ski platform, and edging skis in the wide snowplow. Beginners will constantly struggle with their skis washing out from under them when trying to sidestep or stay in a half- or full-plow position, unless they learn how to put a ski on its inside edge (by angling the ankle and knee slightly inward). Sighted skiers can see the difference between a flat or edged ski; the visually impaired will need to feel it. The guide may need to get on hands and knees and put the skier's skis in the proper edged position to demonstrate this.

**6. Diagonal stride.** Choose a long, flat section of set tracks and direct the skier into the track. Review side-stepping in and out of the track, and practice lifting one ski out of the track to catch oneself if the skier starts to fall to the side.

Here is one simple progression for introducing diagonal stride to a beginner skier:

a. Remove poles and have the skier shuffle with short strides down the track. Her hands should swing naturally by her sides, as in walking (see pp. 17 and 21).

b. Take several short, quick steps, then lengthen strides.

c. Take two short, one long stride, and keep alternating. Tell the skier to glide on the long stride, then take two more short strides and glide again: "Step step glide.... Step step glide...."

d. Get started with several short strides, then lengthen strides by pushing down and springing forward off each ski (the "kick" phase).

e. Repeat by emphasizing swinging each leg forward by driving it forward and then stepping onto it.

f. Hold poles by the middle and ski by letting the arms swing forward with the poles parallel to the ground. Short strides go with short arm swings; longer strides with longer arm swings.

g. Put on pole straps. Show how hand swings remain low, with the pole handle never coming above mid-chest level, and the basket planted next to the foot, pole angled back. (By this point, the skier is able to balance while skiing without poles, so it is easier to show how poles are used for aiding propulsion, not for balance. Watch to be sure a bad habit does not develop now of planting the poles in front, for balance.)

h. Continue skiing with poles, working on longer strides and the poling hand going past the hip, behind the body to complete the poling.

You'll find many more tips on teaching diagonal stride in the sections on advanced skills (p. 16-17) and practice drills (p. 20-22). And remember, this is a complex athletic skill involving the whole body in coordination. Doing it well requires the skier to propel her weight forward, leaning out over the skis—a scary sensation for anyone, but especially one who cannot see. It takes most skiers a lot of time and practice to "get" the glide, but once they do, they will enjoy skiing a great deal more. Stick with it.

#### **7. Snowplow progression.**

After the fundamental skills have been mastered on the flats, proceed to a small practice hill so that your skier can learn to go down an easy decline under control. Practice this progression until the skier can control speed with a half-snowplow in the track and full snowplow outside of the tracks, and come to a stop at any time. Poles may be used during these drills, but must never be dragged in the snow or pointed in front of the skier (particularly dangerous) in an attempt to slow down. Rather, the hands are always held at waist level and slightly in front of the skier, with the poles angled backwards and the baskets off the snow. Focus on a quiet upper body, with no deep bending at the waist or any flailing of arms or poles.

a. Downhill glide. From the top of a short and gentle rise with a set track, have your skier take a few strides and then bring his skis together to glide down the hill, coming to a natural stop at the bottom. Knees and ankles will be slightly bent, chest facing forward, hands held in front at waist level with poles out of the way pointing backwards

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and the baskets behind the skiers.

b. Half-plow from a downhill glide. Briefly review spreading a stationary ski into a half-plow. Repeat the same downhill glide as before, but this time, tell the skier, halfway down, to step into a half-snowplow to slow down and stop sooner. Note that more weight is on the straight ski inside the track. The ski holding the half-plow must keep pushing snow away from the skier, maintaining outward pressure on the heel so the tip does not drift back under the skier and cross the other ski. Repeat with the other ski in half-plow.

c. Gliding snowplow. Move to a smooth slope without set tracks. Practice going from a downhill slide into a full snowplow. Both ski tails are pushed away from the body, while the knees bend and the hips and center of gravity sink down between the skis. The guide should look for a common mistake by watching the tracks left by the skier during the snowplow. Often one ski will leave a sharp line in the snow while the other ski leaves smooth marks. This line is caused by too much weight on one ski, which will prevent the snowplow from braking the skier effectively and might even send him veering right or left. Coach the skier to weight the inside edges more consistently and evenly. Show him while stationary, until both skis are just slightly edged inward and leave a smooth track during the snowplow descent.

d. Change-ups. On a smooth, straight, downhill slope without set tracks, have the skier go from a straight downhill glide into a snowplow, then allow the skis to come back together into a straight glide, back to another snowplow, etc. Once a series of change-ups can be done without stopping, the skier will be ready to control speed with a wide snowplow and do snowplow turns and stops (see page 18).

**8. Uphill skiing.** What goes down must come up. And though we recommend teaching snowplow before tackling the progressive uphill skills described below, as your skier advances to steeper grades it can be useful to work uphill skills first (you might try herringboning up then side-stepping down a few times)—getting familiar with a hill's pitch makes it a lot less scary on the descent.

a. Straight uphill climb. This forward stride involves slightly more bend in the knees, keeping

the weight over the forward foot, and keeping the poles slightly lower and behind the feet to help prevent sliding backward. The steeper the slope, the shorter the stride and faster the pace becomes.

b. Herringbone. This is the skill best suited for steep, untracked hills. The skis will be positioned with tips apart and tails close together, shaping a "V." The skier alternates use of arms and legs as in diagonal stride. The ankles are turned in so that the inside ski edge bites or cuts into the snow and provides a firm base ("terrace" or "platform" can be useful images) to step from. Poles are to the side and slightly back of the skis to help prevent slippage and to help propel the skier forward.

c. Half-herringbone. This variation on the herringbone can be used in set tracks if the grade is too steep for the straight uphill climb but not so steep as to require a full herringbone. Keep one ski in the track and put the other ski (usually the one to the outside of the two-lane tracks, to avoid tangling skis in the middle) into the herringbone position. The ski in the track serves as a guide and permits quick recovery to the diagonal stride when the track levels out.

e. Side-stepping/walking uphill. These options may be used on very steep hills or if fatigue prevents skiing uphill. Stay to the side of the trail (both to preserve the grooming and to make room for any faster pairs coming up behind you), and side-step up the hill, or take off skis and walk.

**9. Double-poling.** When the terrain or snow conditions make the diagonal stride too slow to be efficient, we switch to the double-pole motion. It's especially fun on a slight downhill with good, straight tracks. Skis are kept gliding in parallel while both poles are planted slightly ahead of the feet simultaneously. The weight of the upper body presses into the poles as the poles are strongly pushed backward. The arms continue pushing the poles back until the hands are well past the thighs. The legs remain fairly straight, but not rigid. The real power of the double pole comes from the effective use of core muscles in bringing the weight of the upper body to bear onto the poles (it's like a sit-up—try exhaling forcefully on the "crunch" and inhaling when the hands swing forward). The arm muscles (triceps especially) are used mainly for the second half of the motion.

# INTERMEDIATE AND ADVANCED TECHNIQUES

Once your skier has had some success with the basic techniques—perhaps you’ve been around the 5K trail once or twice together without too many spills, or you’ve already got an experienced skier who has completed a clean 10K—you might want to have another conversation about goals for the rest of the week leading up to Race/Rally day. Ask which parts of the trail and which skills your skier feels most comfortable with, and which are more intimidating or challenging, and why. Ask what you can do (or not do, or do differently) at this point to be most helpful, and be sure to listen. Your skier might want to simply practice and enjoy the skills already attained; part of guiding is knowing when to “shut up and ski,” giving your skier’s brain and body time to absorb all this new information so you both can relax and have fun.

Or your skier might be hungry for more instruction in order to ski smarter and faster on the final day. As partners, celebrate your achievements so far and set some priorities for your remaining time together.

When your skier is ready to refine her technique, here are some tips to try.

## Diagonal stride

**1. Body position.** The key to efficient diagonal-stride skiing is to maintain a forward-inclined body posture, bending forward from the ankles and knees (not at the waist) and keeping the arms down and the poles pointing back. At every level of ability, skiers need to strive to direct their body mass out over the glide area toward the tips of the skis—which means overcoming a very natural fear

of tumbling face-first into the unknown—versus a more vertical/anchored body position in which the weight of the body presses down on the “fish scales” or kick-wax area of the skis directly underfoot, inhibiting the glide. A skier who brings his arms too far up and/or swings his pole tips forward cannot maintain a forward body posture—in fact, the skier is likely to incline backwards, which is a recipe for an unplanned sit-down. Cane users in particular are accustomed to an upright posture with the cane held out in front



of them. Remind your skier to keep the tips of his poles behind his toes as he plants them and to keep his arms out and down. This may need repeating often.

**2. Kick phase.** A skier initiates the kick by bending the knee (to load weight onto the ski) and strongly pushing down (confusingly called the “kick”) and springing off of that ski as the other leg swings forward to glide. The skier’s knees and ankles should be flexed, with the torso leaning forward. As the unweighted foot slides forward, the skier quickly shifts his weight onto it, and it becomes the gliding ski.

**3. Glide phase.** After the kick, the skier drives the other hip and leg forward and shifts his weight to the gliding ski, which is already moving down the track. The skier should keep his head facing forward (“nose ahead of the toes”), back straight, and all his weight on the gliding ski. As the gliding leg is driven forward, the knee is slightly bent and then the leg mostly straightens during the glide, until the knee quickly bends again in anticipation of the next kick.

**4. Pole push.** First, establish an oppositional arm swing, i.e., the right hand swings forward as the left foot glides forward—the same natural movement that occurs during a fast walk, although again, it’s not so “natural” if someone is used to walking with one hand on a cane or guide-dog harness. Watch your skier, as some beginners are out of phase and put the wrong arm forward (right foot, right hand), or have a hard time doing any kind of arm swing at all; help your skier practice the oppositional arm swing until it becomes second nature. Then, refine it for proper diagonal-stride technique: the elbow of the forward arm should be slightly bent and the hand should reach forward and down; the grip on the pole handle is firm but relaxed, not clenched; the pole tip plants into the snow just outside the track and slightly behind the body (about as far back as the toe of the other foot is at this point); and, most importantly, the pole handle itself is angled forward (never held straight up and down).

As the skier’s pole hand (actually the side-heel

of the hand bearing down on the pole strap, not the handgrip itself) and arm strength direct force through the pole down and back into the snow, the skier is propelled forward. The skier should keep his poles close to his sides as he plants them in the snow and pushes off—the fingers might even brush the outer thighs as each hand passes forward and back. If the poles are planted way off to the side, away from the track, or too far forward or behind the body, energy is wasted; explain the physics and try experimenting with different pole plant positions to demonstrate which works most efficiently for propulsion. For maximum forward glide, the skier should release his grip on the pole at the end of each backswing and drive the hand back until the arm is completely extended behind him—and then swing the pole handle forward again as the pole point leaves the snow.

Got all that?! If you’ve been cross-country skiing for a while yourself, it can be easy to forget just how much is going on within a technique like diagonal stride; literally, you are working from head to toe, and you won’t get a decent glide going unless all those parts are working in concert with your equipment. For an instructor/guide working with a novice skier, breaking all those combined actions down into digestible and doable pieces, particularly without being able to resort to a visual demonstration that shows how everything works together, can seem impossible.

Give it time. If frustration sets in, try focusing on one element (like the arm swing), get that down, free-ski for a while, and then work on something else. Refer to the Practice Drills section beginning on page 20 for some more tips. And remember to tap the teaching expertise of our more experienced guides; we all have different ways of explaining these skills and achieving those “lightbulb” moments.

## **Skiing down steep or curving hills**

**1. Straight downhill running position.** The proper posture for staying in a track on a steep or long downhill is to lower the center of gravity

*Help your skier practice the oppositional arm swing until it becomes second nature—then, refine it for proper diagonal-stride technique.*



by flexing the ankles and knees so the hips and upper body are lower to the ground. Do not bend at the waist or thrust the rear backwards. Hands are held at waist height and in front of the skier with the poles inclined backwards.

For more stability while gliding fast downhill, one ski may be moved out of the track. This serves a dual purpose: the wider stance is more stable, and the ski is also ready to do a half-plow in order to keep speed under control. The skier can then vary the speed of descent by letting the skis run straight to increase speed, or maintaining a slight half-plow to slow down.

If the track is curving slightly, the skier may stay in the track without doing a half-snowplow by moving the outside ski slightly forward. For example, if the tracks are curving downhill to the left, the right ski should be moved slightly forward. This should be accompanied by turning the top half of the body (the arms and shoulders) in the direction of the turn.

**2. Half-snowplow.** On curving downhill tracks, the ski on the outside of the turn will preferably be the one in the half-plow position. For example, if the track curves to the left, the right ski will be lifted outside the track and into a half-plow. However, this is not always possible—for example, if the track has an “S” curve. An intermediate skier should be able to shift without stopping from gliding downhill with both skis in the track, to a half-plow on either side for the steepest part of the hill, and back to gliding with both skis in the track so that speed is maintained until the bottom is reached.

**3. Snowplow turn.** On most trails used by SFL, if a hill is steep enough to require use of a full snowplow in order to control speed, the groomed tracks will be suspended, leaving a smooth slope that is easier to ski in the snowplow position. Longer and steeper hills that require use of a full snowplow are seldom straight all the way to the bottom. Often the skier must do snowplow turns. The guide usually moves behind the skier when doing snowplow turns in order to best give commands on when to turn right and left.

To turn left, move the right ski into a wider

plow and shift more weight onto that ski by flexing the knee on that ski.

**4. Pole-holding on difficult downhills or through intersections.** On downhills that are steeper or winding, the skier might benefit from the stability of having the guide hold his pole. After communicating to the skier what is about to happen, the guide should grasp the skier's left pole just below the skier's grip. Tell the skier when you are going to let go, or have the skier tell you if he feels off-balance or out of control and needs to be released to go into a snowplow or controlled fall.

Note: There is a tendency when holding a skier's pole for the guide to pull the skier off-balance toward the guide, causing a fall. The guide must be sure to lean towards the skier and keep the skier's pole where it would normally be, i.e., next to the skier. It takes a confident and competent guide to provide stability rather than pull the skier off-balance.

Pole-holding can also be useful when skiing through an intersection or a crowded area. The guide can hold the skier's pole and direct the skier left and right with a minimum of voice commands, much as is done when guiding a blind person through a crowded room.

**5. Side-stepping or walking downhill.** As with going uphill, side-stepping down a steep hill or removing skis and walking down the side of the hill sometimes is the safest option.

## Step turns

Intermediate skiers should be shown how to do step turns where there is no track, or there is a washed out track going across the flats, or when going around a sharp curve on the flats or gently downhill. Demonstrate first on the flats with no set track by showing the skier how she can edge the right ski and push off of it onto the left ski, several times in a row, until she has gone 90 degrees to the left. Then repeat to the right. Do this until the skier can zigzag to the left and right several steps in a row, while skiing across the flats. Taking several small, quick steps in succession is a more stable way to turn than trying to do a couple of big steps.

*The goal of a good step turn is to take several steps to change direction while maintaining your speed.*

During step turns, the poles should either be kept by one's sides and pointing back, or used for double-poling as needed to help propel through the turn. The goal of a good step turn is to take several steps to change direction while maintaining your speed, and poling is not necessary.

## Kick double-pole

This is an advanced skill—think of it as a hybrid of diagonal stride and double-poling— primarily for long sections of level or gentle up/down hills where extra speed is desired. The skier begins with the same reach forward with both arms as in the double-pole. However, as he reaches forward

with both arms, he adds a small kick forward onto one leg. This forward drive onto one leg should be the same as the when one drives forward onto one leg in the diagonal stride. As the skier double-poles and begins to glide, he brings his back foot forward, next to the other foot, and continues gliding on both skis.

A skier can alternate the motion driving forward onto the opposite leg or repeat with the same leg (as in a scooter kick). The timing of the kick double-pole is steady and sequential: kick... pole.... kick... pole. The upper body releases up on the kick and contracts down (work those abs!) on the poling.





# PRACTICE DRILLS

**R**eady to kick it up a notch—or just need some new ways to communicate proper skiing technique? Add these practice drills to your guide’s “bag of tricks.”

First, here are two teaching principles that can be used at any time, with skiers at any level of proficiency, to help them learn.

## “Do it wrong to do it right”

It can be very helpful to demonstrate what you are aiming for by having the skier do it exactly the

wrong way. Often a light bulb will go on. A few examples:

**1. Body position.** If your skier is having trouble achieving the forward lean, ask her to ski exactly upright and listen to her back ski slapping down hard on the snow when the leg is being driven forward to begin the glide. Then ask again to have her flex the ankle and knee, put the whole body at a forward angle, and feel that the weight transfer happens later, with less slapping noise as the skis pass. First do it wrong, then do it right.

**2. Poling.** When doing the diagonal stride, if your skier is using poles for balance rather than propulsion, have him stand stationary with the legs together and ask him to put his arms straight out in front, with the poles pointing straight down, and try to push himself forward. Of course the skis won’t budge. Then have him plant the baskets next to the foot with arms bent, and push.

If the skier stops poling when his hands are next to his hips (as do most beginners), try a stationary double-pole exercise on a flat section of track. First, ask him to stop poling when the hands get to the hips. The glide will be short, and the poling motion will have to be quick and jerky in order to keep moving forward. Then have him extend the hands all the way behind him while poling. Note how much easier it is to slow down the rhythm and still get more glide when the arms





follow through.

**3. Snowplow position.** In snowplow practice, if your skier is standing too upright, have her stand still on the flats, lock her knees, and use stiff legs to get into the snowplow position (which is very difficult). Then repeat with knees flexed, or “soft”—much easier. If she goes downhill with a deep bend at the waist and the upper body facing the snow, have her stop and bend at the waist completely parallel to the snow and then try to lift a ski into the half-plow position. Then repeat with proper positioning: upper body more upright and just the knees bent to lower the skier’s center of gravity. She will quickly feel the difference in stability by “doing it wrong and then doing it right.”

## Go to extremes

It is often helpful to ask a skier to greatly exaggerate the motion you are looking for. This can be a fun practice drill, helping a skier get out of a rut and do a big motion so that it becomes easier to do the motion you want. A few examples:

**1. If a skier is shuffling along rather than using a dynamic kick.** Ask him to take giant strides forward, doing a full lunge onto the front ski until the knee almost touches the ski, then standing up and swinging the other leg forward into another full lunge. Rest and do this again for several lunges, and then have him only go halfway down and increase the pace, until he is doing a rhythmic diagonal stride with much more dynamic leg bend and kick. *Voila!*

**2. Double-poling.** If a skier is using all arm strength and not compressing the upper body weight onto the poles at the beginning of the double pole, have her lock her elbows next to her body and double-pole using only the upper body crunching (as in a sit-up) down onto the poles. It will feel awkward and jerky, but will make her see that she can double-pole with only her core/abdominal strength and no arm motion. Then add the arm motion back in. Now she’s cookin’ with gas!

*Skiing without poles is one of the most helpful drills for skiers at any level.*

## Other helpful drills

**1. Skiing without poles.** This is one of the most helpful drills for skiers at any level. Find an appropriate grade (flat to slightly downhill for beginners; slightly or moderately uphill for intermediate or advanced skiers), and practice the diagonal stride, completely without poles or with the skier holding his poles in mid-shaft and swinging them past his thighs. The goals for a beginning skier are to move from one foot to the other and to feel comfortable with his skis gliding. More advanced skiers will be forced to do a full weight transfer from ski to ski if they can ski up a moderate hill without poles and without slipping. Encourage your skier to quickly and fully shift his weight from one foot to the other as the hip and leg drive forward and he springs onto the gliding ski.

**2. Skiing only with poles alternating.** Beginners can try this on the flats or a slight decline; more advanced skiers should do this on a slight uphill. Simply stand with skis together (don’t move your feet) and scoot forward on pole-power alone, alternating right and left pole plants. Try it first with legs held stiff and then with legs flexing/extending, bobbing down and up at the knees and ankles with each poling motion. Get into a good poling and bobbing rhythm and see how easily you can go with long, relaxed poling motions. Do it wrong with arms locked straight, and then do it right with arms slightly bent to show how bent arms are able to exert more propulsive force.

**3. Poling motion drill.** This stationary exercise can help a beginning skier understand the rhythm and timing of the diagonal stride. In a flat, open area (indoors or out), stand directly behind the skier and hold her poles, one in each hand, down by the baskets. She points her poles behind herself but otherwise holds them as she would while skiing. Then you and the skier together swing your arms and flex your knees up and down in a coordinated “skiing” motion, while you call the rhythm of what the lower body is doing: down-up... down-up... down-up... Swing your arms, attached to her poles, until she is mimicking your movement and rhythm. You two might look a

little funny, but this tandem “sawing and bobbing” action can help your skier get the feel for how her arms move in concert with the rest of her body in the diagonal stride. Be sure to remind her to keep her upper body forward and her arms down while poling.

**4. Scooter drill.** This is a more advanced drill for skiers with good balance to practice on hard-packed snow, in order to improve weight transfer. (Some skiers have trouble getting the feel of bending the kicking leg to get a strong push onto the gliding ski.) The skier removes his poles and takes one ski off, then uses the boot-only foot to push onto the gliding ski for five to ten strides. Rest and repeat, then switch to the other leg. You might need to ski or run (without skis) alongside him, lightly holding his hand for support (but not letting him twist his upper body to face you and hang on). Or try the scooter drill with both skis on, using one leg as the repeated pusher and one as the glider. The goal is for the skier to completely unweight the pusher foot (pick it up off the snow) during the glide phase. Then help your skier move dynamically from one ski to the other and lengthen the glide between steps, rather than shuffle along with both feet glued to the snow.

**5. Glide drill:** For any level of ability (including your own), it is always helpful to repeat the drill of taking two quick strides followed by one longer glide: Quick-quick-looong... quick-quick-looong... This results in the “long” stride alternating from left to right ski, and reinforces

the need for good weight-transfer and driving the gliding leg forward. Always end this drill by building up speed and transitioning to a strong diagonal-stride motion to maintain the momentum with nice, long glides: quick-quick-looong... and then looong... looong... looong... etc.

**6. Uphill running:** If a skier is taking excessively long strides uphill, slipping, or not getting the proper rhythm of arms and poles in the herringbone, have her practice running or bounding up short hills (with her skis on!). Very short, quick jogging steps while going up a moderate hill, in either diagonal stride or herringbone, is a good way to achieve a complete weight shift (stamping those “fish scales” or kick-wax zones into the snow for better traction, right and left) while getting the poles correctly synchronized with the legs.

**7. Ski without poles, again!** This drill can’t be repeated enough. Even very proficient skiers and guides should ski while holding their poles in mid-shaft (or by letting the guide take the skier’s poles) for at least a few minutes every day, along various sections of track. This is the best way to improve all skiing technique and build confidence.

**W**e’ve shared a lot of information and ideas with you—and there’s more to come! *Thank you* for putting in this extra time toward giving yourself and your skiing partner the best skiing experience possible. We hope your week at Ski for Light will lead to many other incredible winter journeys.



# APPENDIX: SKI INSTRUCTION

## SUMMARY/CHEAT SHEET

**R**eady for the pop quiz? Here's a briefly annotated outline of the same Progression of Instruction described in detail beginning on page 10 of this handbook; the page numbers in parentheses indicate where you'll find each skill set explained more thoroughly.

Copies of an even *more* brief "ski instruction cheat sheet" will be available during guide training for you to take into the field and refer to as needed. Remember that many skills can be introduced indoors, then reviewed and mastered in later sessions out on the snow.

### **1. Introduction to equipment/apparel/snow.**

Make sure your skier understands how the skis, boots, and poles work (first check that everything fits and is in trail-ready condition, since most beginners will be using rental equipment). Also make sure she is dressed in layers suitable for the day's weather and anticipated exertion level.

**2. Stationary/stepping skills (p. 10-11).** Master each series to the left and right, without poles, and consider repeating these exercises as a warm-up before each skiing session.

- a. balance on one ski
- b. side-stepping with skis perfectly parallel
- c. side-step lunge, from narrow to wide stance
- d. turn around tips (snowplow position)
- e. turn around tails (herringbone position).

**3. Fall/recovery (p. 11).** Start from a position of kneeling on one knee, other foot forward, to practice the last half of getting up first, then practice getting up from all the way down. And remember, it's OK to remove skis.

**4. Emergency quick stop (p. 6).** Discuss the "Sit!" command with your skier and practice it on the snow prior to encountering an emergency—if possible, within your first hour of skiing together.

### **5. Half-snowplow**

**(p. 12).** The fundamental skill for controlling speed and stopping: Balance on one ski while lifting the other out of the track and exerting light pressure in a narrow then wider half-plow.

**6. Edging (p. 12).** Help the skier go from flat to edged skis in all three basic positions (parallel, as when side-stepping up or downhill; snowplow, and herringbone).

**7. Diagonal stride (p. 15, 16-17, 20-22).** Break this complex skill down to its component parts: forward body position (flexed ankles and knees); strong kick down and back; the glide (drive leg forward to transfer *all* weight onto glide ski), and poling with follow-through (poles always angled backward).

### **8. Downhill progression (p. 12, 14-15, 18)**

- a. Downhill glide
- b. Half-plow from a downhill glide
- c. Gliding snowplow, then change-ups

### **9. Uphill progression (p. 12, 15)**

- a. Straight uphill ski, with quick steps
- b. Herringbone
- c. Half-herringbone

**10. Double-poling (p. 15).** Initiate with upper-body weight bearing down on poles, work the ab crunch, then follow through with both arms pushing and extending back.



# NOTES

## Credits

**T**his edition of the Ski for Light Guide Handbook, substantially revised in 2012 and updated for the 2014-15 season, is the product of about a year's worth of research, consultation, and long-distance debates between blind skier Scott McCall and veteran instructor/guides Bob Civiak and Ken Leghorn, with final editing, layout, and photography by Julie York Coppens. Our goal: a portable, readable document to help *all* SFL guides, not just newcomers, accomplish more with their skiers while staying safe and having fun. We welcome your feedback for future editions.