PSIA-*Rocky Mountain*-AASI
ADAPTIVE EXAM GUIDE
For:
FUNCTIONAL SKIING

(Video with descriptions available online at psia-rm.org)

Functional skiing is defined as the basic skill level needed for instructors to safely and successfully teach adaptive skiers. Whether guiding a blind skier or safely tethering a bi-ski, instructors should exhibit a minimal level of competency in order to be most effective with special-needs students. PSIA-Rocky Mountain has identified specific skiing maneuvers and tasks that when practiced; enhance an instructor's demonstrations, personal skiing ability and **the** ability **to** assist students utilizing specialized equipment. These maneuvers can also be used as teaching tools and exercises to build the fundamentals of skiing for any discipline. Specific types of terrain and snow conditions (such as bumps and variable snow conditions) are practiced so that instructors can provide lessons in a variety of mountain situations.

As the baseline for all levels of Adaptive Certification, instructors must demonstrate proficiency with all functional skiing maneuvers and tasks listed below. This minimum standard not only increases teaching effectiveness, it helps develop solid technical understanding into how turns develop and the specific skills and skill blends utilized at different levels of skiing.

Side Slip to Hockey Stop

Why this maneuver? This maneuver is extremely important as a method used in tethering mono or bi-skis, guiding blind students or working with any other disability. The Side Slip to Hockey Stop' is essential for mastering the beginner terrain moving into the intermediate zone and can be performed in any discipline.

This maneuver is performed on smooth, easy blue terrain.

Description: From a straight run in the fall line, initiate a sideslip through simultaneous turning of both legs across the fall line while maintaining a stable upper body and balanced/neutral stance. *(A slight flexion of the legs will enhance the ability to turn the feet and legs independent of the torso)*

1. While side-slipping, a natural lead of the uphill ski and body keeps hips free to adjust edge angles. Upper body should face down the hill while skis turn across the hill.
2. Sideslip should be maintained in a narrow corridor, without traveling across the hill in a corridor no more than the approximate length of 1 ½ skis.
3. Continuous fore-aft adjustments will help maintain a perpendicular side-slip with minimal travel across the hill.
4. After a distinct side slip, progressively tip both feet and legs into the hill to engage edges to a balanced stop, or "hockey stop".
5. Continuous adjustments from foot-to-foot will help center skier over both skis.

6. Reverse direction and repeat the maneuver to the other side.

Falling Leaf

Why this maneuver? This maneuver allows instructors to move slowly down a hill (similar to the side slip), while adjusting across the hill to match the adaptive student's path of travel. The Falling Leaf maneuver saves instructors from having to wedge in the fall line, thus making it an energy-efficient way to ski with novice adaptive skiers. When used as a ski drill it teaches the adaptive student about pressure control and is a great task used in the advanced beginner zone.

This maneuver is performed on steeper green to easy blue, groomed terrain.

Description: From a side slip in the fall line, use feet and legs to steer skis back and forth across the hill. The skier maintains the same directional orientation while the skis move forward and backward. A swooping Z-shaped pattern with coordinated blending of skills will help maintain speed control and allow the skier to maneuver as desired across the hill.

1. From a side slip in the fall line, use coordinated flexing and extending movements of the joints, along with for/aft pressure of the skis, to allow the skis to move forward and backward across the hill.
2. Use turning movements of the legs and feet as necessary to control shape and speed.
3. Use tipping movements of the feet and legs to control edge engagement.
4. This maneuver should be symmetrical with the fall line.
5. This maneuver is performed in both directions.

Traverse - to Diagonal Side Slip - to Traverse

Why this maneuver? This maneuver is another way for instructors to move slowly across the hill while assisting students, without having to hold a wedge position. The ability to control the degree of edge engagement and make subtle adjustments is also an important skill when tethering adaptive students on specialized equipment. As an exercise, it enhances the student's ability to maintain balance and stance while establishing edge control.

This maneuver is performed on steeper green to easy blue, groomed terrain.

Description: From a clean traverse across the fall line, use ankles and knees to release the edges of the skis so they side-slip diagonally across the hill. After a brief period of diagonal side slipping, re-engage the ankles using ankles and knees and continue in a clean traverse across the hill.

1. From a traverse, release both edges to a forward side slip through simultaneous tipping movements of the feet and legs.
2. The upper body should remain stable and in a slightly countered relationship to the feet and legs. *(Counter is developed through turning movements of the feet and legs)*
3. After the diagonal side slip, re-engage both edges through simultaneous tipping movements of the feet and legs.

4. Perform this maneuver in both directions across the hill.

Stem or Step Turns

Why this maneuver? This maneuver is an excellent way to get from one direction to another quickly. It is extremely important in maintaining speed control when tethering because it minimizes time spent in the fall line when changing directions. This maneuver is not necessarily tough but it is also referred to as a blocking turn to stop and change the direction of travel.

Description: At the end of a turn, stem the uphill ski into a diverging (wedge) position. Quickly transfer weight to the uphill ski and initiate the turning process. Match the inside ski from a wedge position to a parallel position and complete the turn with the skis parallel.

This maneuver is performed on harder blue terrain to easy black terrain, showing quick directional changes.

1. End each turn with the skis parallel. The skis can either be moving forward slowly as the turn is finished, or skidding sideways for speed control. This maneuver can also be demonstrated from a complete hockey stop!
2. Use the appropriately sized wedge position to regulate the initiation of the next turn. This can either be large or small, depending on the situation.
3. The uphill ski can be stepped and placed into this wedge position, or the tail of the ski can be brushed out through the snow until the wedge position is achieved.
4. Once the ski has been placed, make an immediate and complete weight transfer to the uphill ski. This will start the turn initiation into the new turn and help to minimize time in the fall line.
5. Quickly match the skis once again into a parallel position by sliding or brushing your inside ski into the parallel. This is considered a 1-2, or sequential movement. The matching movement is made with a rotation of the leg and foot, steering the ski to match.
6. The turn is completed with the skis parallel. Turn shape can be round, skidded or side slipped to a hockey stop to maintain speed control.
7. Stem Step Turns, of any shape, should be linked together with rhythm and flow. Speed control is maintained using turn shape.

Hour Glass Parallel Turns with Progressive Radius Reduction

Why this maneuver? It is an important for adaptive instructors to be able to change the radius of their turns while maintaining speed control in order to manage specialized adaptive equipment safely. Hour Glass Turns are an excellent way to practice this skill and to teach to any level of student.

Description: This maneuver is a series of parallel turns that start from a medium radius. Each subsequent medium radius turn decreases in radius to become short radius turns. From short radius, the turns are then increased once again back to medium radius turns.

The entire series of turns paints an "hour glass" track in the snow. This maneuver is performed with consistent speed control, using turn shape, so that the short radius turns are no faster than the medium radius turns. If numbers were assigned to each turn size, the larger turns might start at 6 then progressively get smaller, to a series of turns at a size of 2, and then back to the larger turn size of 6.

The sequence might look like this, 6 – 5 – 4 – 3 – 2 – 2 – 3 – 4 – 5 – 6. This sequence would be repeated until reaching the agreed upon stopping point and finished with a hockey stop.

This maneuver is performed on harder blue to easy black groomed terrain with an even fall line pitch.

1. Turns can be performed as a basic parallel or dynamic parallel (depending on the skill level of the skier) or be performed disability specific.
2. All skiers should perform this maneuver with a balanced, centered stance.
3. Turns should be symmetrical on each side.
4. A distinct difference from the medium radius turns to the short radius turns and back to medium radius should be evident.
5. Speed should remain consistent throughout the entire demonstration.
6. Speed control is achieved through skill-blending and turn shape.

Free Ski Run

Why this task? Watching skiers ski their preferred turns, or "free ski", allows for an assessment of their basic skiing mechanics. Most skiers have specific styles and preferred turning mechanisms that either enhance or hinder their ability to ski a variety of terrain or perform specific skill-based maneuvers with accuracy (such as a hockey stop). Adaptive instructors are assessed while free skiing to help coach them towards better skill and greater overall skiing success.

Description: Skiers are asked to ski a section of hill at their own pace and in their own personal style. With the previous set of skiing maneuvers, the maneuvers themselves dictate a skier's basic skill, their ability to blend skills and their basic understanding of what to do with their skis and body in order to successfully perform the maneuver. For example, a skier cannot successfully perform a side slip if they are unable to release their edges and allow the skis to slide sideways down the hill.

In free skiing, the task does not necessarily outline success. Skiers can ski down a slope and 'make it", but their overall technique may be flawed. In this task, there are certain guidelines that account for successful free skiing or for free skiing that needs some work. Typically, if a skier has a flawed overall technique, it will not only be apparent in their free skiing, but their ability to perform specific maneuvers (like a Stem Step Turn) will be hindered as well.

The free ski run is performed on groomed blue or easy groomed /black terrain.

1. Turns should be linked (no traverse) at a minimum of dynamic parallel *or disability equivalent*.

2. Skiers should be able to utilize ski design and skill blending to create turn shape.
3. Stance should be balanced and centered.
4. Progressive movements should be used to simultaneously steer the skis through the turn.
5. Speed is controlled through turn shape and should be consistent for the entire run.

Bump Run

Why this task? Bumps happen. Especially here in the Rocky Mountains, our soft snow that starts off as groomed in the morning can quickly become bumps by the afternoon. It is important for adaptive instructors to be able to ski in bumps so that they can effectively work with mountain skiing students in a variety of situations.

Description: Skiers are asked to ski a section of hill with relatively easy bumps at their own pace and in their own personal style. Since bumps can change drastically from turn to turn, skiers should be able to "adapt" their skiing and adjust their turns to meet the demands of the situation.

This task is performed on blue bumps runs, with a moderate pitch and smaller sized bumps. Only one of the following will be examined:

1. **Fall-Line Bump Skiing** with…
    a. Rhythmical, linked, parallel, short to medium radius turns (no traversing or stemming).
    b. Consistent speed maintained through turn shape.
    c. An appropriate blend of skills.
    d. Tactical choices appropriate to terrain and snow conditions.
2. **Medium to Large Radius Turns in the Bumps** with…
    a. Linked turns showing a balanced and centered stance.
    b. Maintenance of ski snow contact through absorption.
    c. Consistent speed maintained through turn shape.
    d. Tactical choices appropriate to terrain and snow conditions.

Variable Terrain and Snow Conditions

Why this task? Some of our adaptive students enjoy the experience of seeing the whole mountain. Whether low intermediate or advanced, students will need an instructor capable of skiing with them no matter what the terrain is or what the conditions of the day may be!

Description: Skiers are asked to ski a section of hill that has not been recently groomed. Conditions could range from small **blue** bumps to chopped up snow or 8+ inches of powder. Skiers should be able to "adapt" their skiing and adjust their turns to meet the demands of the situation.

This task is performed on an *un-groomed* blue run.

1. Turns should be linked (no traverse) at a minimum of dynamic parallel *or disability equivalent.*
2. Skiers should be able to utilize ski design and skill blending to create turn shape.
3. Stance should be balanced and centered.
4. Progressive movements should be used to simultaneously steer the skis through the turn.
5. Speed is controlled through turn shape and should be consistent for the entire run.

Synchronized Skiing with one or more Partners:

Why this task? Synchronized skiing is really fun! It is also a good measure of your ability to adjust your skiing to another person's turn shape or rhythm. As adaptive instructors, these adjustments must be made in order to successfully meet the skiing needs of our students.

Description: Skiers can synchronize their skiing in pairs or with 3 or more other skiers. In this task, the group of skiers will cue off the designated leader and match their turns exactly. Typically a set rhythm is established, along with a starting turn direction left or right. All skiers start and end together at the same time. Voice cues help to establish basic rhythms and other performance criteria. There are a variety of group formations that can be utilized when synchronized skiing, such as side-by-side, skier in front and behind, lines, diamond formations, flying "V" formations and others.

This task is performed on groomed blue to easy groomed black terrain.

1. Skiers should have the ability to pace as the leader and adapt as the follower(s). The leader is responsible for setting up the synchronized skiing exercise. The follower is acting according to how the leader sets up the task.
2. Turns should occur at the same time rather than in each others tracks.
3. Skiers should have a coordinated finish with a balanced hockey stop.
4. The leader and follower switch roles and repeat the same task, but this time the exercise is set up by the new leader.