

## PSIA-I Alpine Task Matrix

The 3 task matrices describe skiing with specific application of different skill blends. Mastery of the tasks in the 3 matrices can help create versatile skiing. All tasks require skilled simultaneous use of all 5 skiing fundamentals. Some tasks may emphasize a larger range of (highlight) a particular fundamental. Other tasks represent standard demonstrations (basic blends) of traditional benchmarks in a skier's progression. Lastly, some tasks illustrate how a skier adapts (applies) their skill blend to the varied mountain environment. An instructor should also be able to describe, demonstrate and prescribe each of these tasks appropriately in a lesson.

### Highlighted Skills Task Matrix v3.0 9/16/15

These tasks represent exercises and teaching tools that enhance a skier's versatility. This collection of movements can help evaluate the quality of a skier's movement patterns, identify misunderstandings, and structure meaningful practice. In isolation these tasks do not represent skiing or good skiing. However, each task can improve skiing when appropriately prescribed and practiced. Candidates should become familiar with the tasks within the certification level they are testing towards and the tasks that precede them.

L3	L2	L1	Task	Highlighted	Ski Performance	Body Performance
		Level 1	<b>Guided Uphill Arc</b> Blue Groomed	<b>Rotary/Pressure Control</b>	<ul style="list-style-type: none"> <li>• Skis remain parallel</li> <li>• The skis are turned more than tipped leaving a skidded track</li> <li>• Skis shape the arc progressively</li> <li>• Skis bend from tip to tail</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Legs turn more than they tip</li> <li>• Continuous turning comes from legs under a stable upper body</li> <li>• Continuous tipping movements come from feet and legs</li> <li>• Joints flex proportionately to keep center of mass over base of support</li> </ul>
			<b>Carved Uphill Arc</b> Blue Groomed	<b>Rotary/Edge Control</b>	<ul style="list-style-type: none"> <li>• Skis remain parallel</li> <li>• Skis are tipped more than turned and leave two thin arcs in snow</li> <li>• Skis shape the arc progressively</li> <li>• Skis bend from tip to tail</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Legs tip more than they turn</li> <li>• Continuous turning comes from legs under a stable upper body</li> <li>• Continuous tipping movements come from feet and legs</li> <li>• Joints flex proportionately to keep center of mass over base of support</li> </ul>
			<b>Straight Run Leapers</b> Green Groomed	<b>Pressure Control</b>	<ul style="list-style-type: none"> <li>• Skis are aimed straight down the fall line</li> <li>• Ski bend from tip to tail</li> <li>• Both skis leave the snow at the same time and land at the same time</li> <li>• While in the air skis are parallel to the slope</li> </ul>	<ul style="list-style-type: none"> <li>• Center of mass is over the center of the feet</li> <li>• Legs extend to create hop</li> <li>• Legs flex to absorb the landing</li> <li>• Upper body remains stable, very little movement</li> </ul>
			<b>Skate on Flat Terrain</b> Green Groomed	<b>Edge/Pressure Control</b>	<ul style="list-style-type: none"> <li>• First, the ski's edge angle is increased</li> <li>• Second, the amount of the ski's bend is increased</li> <li>• Edged ski leaves thin track in the snow</li> <li>• Opposite ski glides with both edges contacting the snow</li> </ul>	<ul style="list-style-type: none"> <li>• Upper leg twists to edge ski</li> <li>• Ankles, Knees and Hips Flex and Extend to facilitate skating movement</li> <li>• Center of mass moves from foot to foot</li> </ul>
			<b>Vertical Side Slip</b> Blue Groomed	<b>Edge/Pressure Control</b>	<ul style="list-style-type: none"> <li>• Skis slip at a consistent rate</li> <li>• Skis maintain parallel relationship</li> <li>• Uphill ski is ahead of downhill ski</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Upper body faces downhill</li> <li>• Balance is over the downhill foot</li> <li>• Lower leg is used to control edge angle</li> </ul>

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L2	Task	Highlighted	Ski Performance	Body Performance
	<p><b>Leapers</b> Green or Blue Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Skis leave ground on uphill edges</li> <li>• Both skis take off and land at the same time</li> <li>• Skis land on downhill edges</li> <li>• Skis shape a round turn</li> <li>• Turns may be skidded or carved depending on terrain and snow condition</li> <li>• Medium or large radius</li> </ul>	<ul style="list-style-type: none"> <li>• Body is long at the start of the turn and short to finish</li> <li>• Extension movements come from legs; intensity and rate facilitate take off</li> <li>• Flexion movements facilitate a controlled landing</li> <li>• Upper body remains stable during takeoff and landing</li> <li>• Tipping/turning movements come from legs under stable upper body</li> </ul>
	<p><b>Railroad Track Turns</b> Green Groomed</p>	<p><b>Edge/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Tails follows tips, the skis are carving exclusively</li> <li>• Tracks are linked in both direction</li> <li>• Skis stay the same distance apart</li> <li>• Skis flatten and tip at the same rate, time, and for same duration</li> <li>• Turns made in corridor one cat track wide</li> </ul>	<ul style="list-style-type: none"> <li>• Progressive tipping movements come from legs under stable upper body</li> <li>• Flexion and extension movements are progressive and keep center of mass over base of support</li> </ul>
	<p><b>Tracer Turns</b> Blue Groomed</p>	<p><b>Edge/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• One ski remains weighted</li> <li>• Skis turn at a consistent rate through all three turn phases</li> <li>• Non weighted ski remains on the snow and parallel to weighted ski</li> <li>• Turns are linked, medium or large radius</li> </ul>	<ul style="list-style-type: none"> <li>• Tipping movements come from leg under stable upper body</li> <li>• Lateral balance is directed towards the weighted ski</li> <li>• Flexion and extension movements are progressive and keep center of mass over base of support</li> </ul>
2	<p><b>Thousand Step Turns</b> Green or Blue Groomed</p>	<p><b>Edge/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Continuously step from edged ski to edged ski while turning both directions</li> <li>• For each step the ski is lifted parallel to the ground</li> <li>• Skis bend from center when on the ground</li> <li>• Leave a well-defined track in the snow with each step</li> <li>• Skis maintain a parallel relationship to each other</li> <li>• Control speed by going back up the hill at turn finish</li> <li>• Medium or large radius</li> </ul>	<ul style="list-style-type: none"> <li>• Weight switches from foot to foot through independent flexion/extension of the legs</li> <li>• Fore/aft and lateral balance are maintained over the weighted ski</li> <li>• Edging movements come from the lower body</li> </ul>

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<b>Level</b>	<p><b>Linked Pivot Slips</b> Blue Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Skis are twisted simultaneously at a consistent rate</li> <li>• Pivot points are under center of each ski</li> <li>• Skis are tipped at same time and rate</li> <li>• Skis pivot for roughly same duration as they slip</li> <li>• Corridor is less than one cat track wide</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Turning comes from legs under a stable upper body</li> <li>• The upper body is continuously directed down the corridor</li> </ul>
	<p><b>How Slow Can You Go</b> Green or Blue Groomed</p>	<p><b>Rotary/Edge Control</b></p>	<ul style="list-style-type: none"> <li>• Speed is consistent and as slow as possible</li> <li>• Skis leave brushed tracks</li> <li>• Skis remain same distance apart</li> <li>• Skis tip at same time and rate</li> <li>• Skis turn at same time and rate</li> <li>• Small or medium radius</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous and simultaneous turning comes from legs under a stable upper body</li> <li>• Simultaneous tipping movements come from legs under a stable upper body</li> <li>• Use pole plant to maintain rhythm</li> </ul>
	<p><b>Straight Run w/ ski to ski hop</b> Green Groomed</p>	<p><b>Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Skis maintain a straight run in the fall line</li> <li>• Only one ski is on the snow at a time as the skier alternates between gliding on left and right</li> <li>• Both edges of gliding ski contact the snow</li> <li>• Lifted ski remains parallel to the slope</li> </ul>	<ul style="list-style-type: none"> <li>• Ankle remains flexed</li> <li>• Hip and knee extend to initiate hop</li> <li>• Hip and knee flex to absorb landing</li> <li>• Upper-body makes lateral adjustment to realign with gliding ski</li> </ul>
	<p><b>Hockey Stop</b> Blue Groomed</p>	<p><b>Rotary/Edge Control</b></p>	<ul style="list-style-type: none"> <li>• From a straight run the skis pivot 90 degrees into sideslip                             <ul style="list-style-type: none"> <li>• Skis sideslip for a short duration maintaining a 2 meter wide corridor</li> </ul> </li> <li>• Edge angle is quickly and intensely increased to produce a crisp edge set</li> <li>• A pole plant is applied at edge set</li> <li>• Finish position is held for 3 seconds</li> </ul>	<ul style="list-style-type: none"> <li>• Legs rotate simultaneously</li> <li>• Countered alignment is maintained during sideslip phase</li> <li>• Edge angle controlled by a combo of knee and hip angulation</li> <li>• Upper body used to position the downhill pole in a lateral and slightly forward position from the downhill foot</li> </ul>
	<p><b>Stork Turn</b> Blue Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Inside ski tail lifted from top of shaping phase through the finish phase</li> <li>• Inside ski tail remains higher than ski tip</li> <li>• Ski leaves brushed track</li> <li>• Medium or large radius</li> </ul>	<ul style="list-style-type: none"> <li>• Hip and knee flex to raise inside ski tail</li> <li>• Outside leg extends to apply pressure to outside foot</li> <li>• Upper body remains centered over base of support</li> <li>• Upper body is aimed down the corridor throughout.</li> </ul>

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L3	Task	Skills	Ski Performance	Body Performance
	<p><b>Hop-Turns</b> Blue or Green Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Skis leave the ground at the same time</li> <li>• Skis are rotated approximately 180 degrees in the air</li> <li>• Skis maintain a roughly parallel relationship through take off, rotation and landing</li> <li>• Pivot point is under the foot</li> <li>• Fore/aft travel of the skis is minimal</li> <li>• Little to no lateral displacement of the skis on the</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Knee and hip extension create hop</li> <li>• Knee and hip flexion absorb the landing and create alignment with the outside ski</li> <li>• Legs turn against upper body</li> <li>• Blocking pole plant may assist leg rotation</li> </ul>
	<p><b>Short Turn Leapers</b> Blue Groomed</p>	<p><b>Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Round, short radius within a 5 meter corridor</li> <li>• Both skis leave the snow simultaneously</li> <li>• Ski edges engage upon landing and begin to shape turn                             <ul style="list-style-type: none"> <li>• A constant speed is maintained</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Ankles, knees and hips flex through turn completion to set up a forceful extension up and across skis.</li> <li>• Pole plant is performed and timed just before the extension.</li> </ul>
	<p><b>Pivot Slips/Short Radius Combo</b> Blue Groomed</p>	<p><b>Rotary/Edge Control</b></p>	<ul style="list-style-type: none"> <li>• 5 - 7 round short radius turns followed by 5 - 7 linked pivot slips followed by 5 - round short radius followed by 5 - 7 pivot slips</li> <li>• Performed at Basic Parallel speed</li> <li>• Short turns stay within 4 meter corridor</li> <li>• Pivot slips stay within a 2 meter corridor</li> <li>• Maintain consistent rhythm and speed throughout</li> </ul>	<ul style="list-style-type: none"> <li>• Use a wide range of edge angle by alternating between knee and hip angulation</li> <li>• Legs turn against pelvis and upper body</li> <li>• Upper body continues to aim down the fall line</li> <li>• Skier uses pole touch for every change of direction.</li> </ul>
	<p><b>Railroad Track Garland</b> Blue Groomed</p>	<p><b>Edge Control</b></p>	<ul style="list-style-type: none"> <li>• A series of linked turns across the fall line.</li> <li>• Ski tails follow ski tips, the skis are carving exclusively</li> </ul>	<ul style="list-style-type: none"> <li>• Edge angle is controlled with the use of knee and hip angulation</li> <li>• The upper body realigns with the outside ski</li> </ul>
	<p><b>1 Ski Hockey Stop</b> Blue Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• 1 ski is in contact with the snow as straight run begins down the fall line</li> <li>• The ski is pivoted across the fall line on the downhill side                             <ul style="list-style-type: none"> <li>• Edge angle is increased to produce a stop</li> </ul> </li> <li>• Uphill ski is kept off the snow.</li> <li>• A corridor of 1 cat track width is maintained</li> </ul>	<ul style="list-style-type: none"> <li>• Legs turn against upper body</li> <li>• Center of mass is through center of the gliding/pivoting ski</li> <li>• Edge angle/pressure are increased with knee and hip angulation</li> <li>• Blocking pole plant may be used.</li> </ul>
	<p><b>Retraction Pivot Slips</b> Blue or Black Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Skis are twisted simultaneously at a consistent rate</li> <li>• Pivot points are under center of each ski</li> <li>• Skis are tipped at same time and rate</li> <li>• Skis pivot for roughly same duration as they slip</li> <li>• Skis maintain a consistent 2 m corridor</li> </ul>	<ul style="list-style-type: none"> <li>• Lower and upper body flex together simultaneously absorbing pressure and releasing edges allowing the skis to pivot</li> <li>• Body extends to add pressure and engage edges during slip phase                             <ul style="list-style-type: none"> <li>• Upper body remains centered over base of support</li> </ul> </li> <li>• Upper body is aimed down the corridor throughout</li> </ul>
	<p><b>One Footed Garlands</b> Blue Groomed</p>	<p><b>Edge/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Performed while going across the hill</li> <li>• Tail follows tip to create carved ski performance</li> <li>• Track is linked in both directions</li> <li>• Lifted ski remains relatively level to snow</li> <li>• Ski tips progressively</li> </ul>	<ul style="list-style-type: none"> <li>• Tipping movements come from leg under stable upper body</li> <li>• Lifted leg remains fairly quiet and under the pelvis</li> <li>• Flexion and extension movements are progressive and keep center of mass over base of support</li> <li>• Poles may be used to assist movement of center of mass towards new turn</li> </ul>

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<b>Level 3</b>	<p><b>Pivots Slip Change-ups</b> Blue or Black Groomed</p>	<p><b>Rotary/Pressure Control</b></p>	<ul style="list-style-type: none"> <li>• Starting from the side slip position the skis are twisted 90 degrees into fall line, then twisting stops</li> <li>• Skis straight run in line fall line then are twisted 90 degrees out of fall line to complete 180 degree rotation</li> <li>• Both skis are twisted at the same rate</li> <li>• Skis tip/release at same time and rate</li> <li>• Corridor width is less than one cat track</li> </ul>	<ul style="list-style-type: none"> <li>• Ankles remain flexed</li> <li>• Turning comes from legs under stable upper body, promoting upper-lower body separation</li> </ul>
	<p><b>White Pass Turns</b> Blue or Black Groomed</p>	<p><b>Pressure/Edge Control</b></p>	<ul style="list-style-type: none"> <li>• Inside ski is lifted in the finish phase and remains lifted through initiation as it becomes the outside ski</li> <li>• Ski that is off the snow is relatively level to the snow without the tip or tail touching to assist in the turn</li> <li>• New outside ski is placed on the ground and pressured in the shaping phase</li> <li>• Turn transition is on one ski</li> <li>• Performance may be skidded or carved depending on terrain, speed and turn radius (medium or large)</li> </ul>	<ul style="list-style-type: none"> <li>• Ski turns at a consistent rate through all three turn phases</li> <li>• Center of mass remains balanced over the outside ski through finish phase and remains balanced on the same ski through initiation</li> <li>• Outside leg is extended through shaping to facilitate balance towards the outside ski</li> </ul>
	<p><b>Edge Change on Flexion</b> Blue Groomed</p>	<p><b>Pressure/Edge Control</b></p>	<ul style="list-style-type: none"> <li>• Turn shape is consistent and controls speed</li> <li>• Skis change edges simultaneously at start of turn</li> <li>• Tipping is increased in shaping phase</li> <li>• Skis begin to flatten in finish phase</li> <li>• Skis remain same width apart</li> <li>• Medium or large radius</li> </ul>	<ul style="list-style-type: none"> <li>• Body is short at the start of the turn and long to finish</li> <li>• All joints in the body flex proportionately during the edge change</li> <li>• All joints in the body extend progressively and proportionately during shaping and finishing phase</li> <li>• Fore/aft adjustments keeps center of mass centered over base</li> </ul>