

PSIA - ROCKY MOUNTAIN - AASI ADAPTIVE CERTIFICATION STANDARDS Adaptive Alpine Exam Material Level 3

Revision 08-01-19



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Local and program regulations and safety guidelines take precedence over this information. It is in your best interest to exercise due diligence in determining the appropriateness of the information for your particular circumstances. In addition, please take into account any and all factors that may affect your lesson. This includes but is not limited to: the health, well-being and fitness of the guest; weather conditions; terrain; other people on the slope; your own abilities, as well as those of your guest and anyone who may accompany you.

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Note: The Americans with Disabilities Act (ADA) requires that testing entities such as PSIA-RM-AASI make "reasonable accommodations" for qualified candidates with disabilities (whether physical or cognitive) and to the extent that they would not "fundamentally alter" the services being provided. Members with disabilities who are considering applying for an education course or certification exam must contact PSIA-RM-AASI at 970-879- 8335 at least four weeks in advance of a scheduled course or exam to provide notice of their requested reasonable accommodation and discuss their situations. This allows PSIA-RM-AASI to assess your request for a reasonable accommodation and to plan for reasonable accommodations, if necessary. Requests for accommodations will be considered on a case-by-case basis.

The essential eligibility requirements for each Adaptive Alpine Level 3 course and exam are presented in this exam material. The standards are national in scope and their maintenance is necessary in the interests of public safety, effectiveness, value for the consumer, and guest/employer expectations.

The ADA does not require reasonable accommodations for a transitory or minor disability. A transitory disability is an impairment with a duration of six months or less, such as one caused by illness or injury. If this applies to you, you may contact the PSIA-RM-AASI office to receive or refund or to transfer to a future clinic or exam.

You may refer to the PSIA-RM-AASI Americans with Disabilities Act (ADA) Policy for further information.

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Candidate Prerequisites

A candidate for Adaptive Level 3 Certification must meet the following requirements:

- Be a current PSIA member.
- Be an employee or volunteer of a recognized ski school or adaptive ski program and have a minimum of 300 hours of adaptive ski teaching.
- Be certified Adaptive Level 2 through PSIA-RM-AASI. (Note: if your Adaptive Level 2 certification is not through PISA-RM-AASI, please contact the PSIA-RM-AASI office at 970-879-8335.)
- Attend the Alpine Level 2 Technical Foundations clinic OR
- Attend the Alpine Level 2 Movement Analysis clinic.
- Suggested but not required: Attend additional Alpine Level 2 clinics.
- Suggested but not required: Attain Alpine Level 2 certification.
- Attend the Adaptive Alpine Level 3 Prep Clinic.

General Study Guidelines

1. Adaptive instructors teach skiing to people who just happen to have a disability. Learning the fundamental concepts of alpine skiing and adapting them to various situations makes for the ability to provide effective lessons to students who have special circumstances.
2. Be able to explain the “Why?” behind everything you say and do. Examiners most favorite question is “Why?”.
3. Know about all the diagnoses listed in each reference book. You are expected to know primary and secondary diagnoses, multiple diagnoses, and how they may affect the body, brain, and behavior. Know how and why each diagnosis may affect ski technique and be able to implement methods to respectfully and effectively work with each person and his/her diagnosis.
4. Know the assessment process for any student. Build a profile of the student from information gathered. This includes all cognitive, affective, and physical aspects, whether associated with a specific diagnosis or not. The process can be applied to able-bodied guests as well.
5. Practice verbalizing the assessment process, the movement analysis process, and the progressions built from that movement analysis. Use technical terms clearly and concisely when speaking to peers and non- technical terms when teaching. Do not get caught in the trap of using technical terms if you are unsure of the definition and on-the-hill application.
6. Study and practice using a variety of models for teaching styles, learning styles, movement analysis, lesson structure, and coaching. Develop your own models based on what works best for you.
7. While you are expected to teach Levels 1 – 9, emphasis is placed on Levels 7 – 9 plus teaching students with multiple diagnoses at any skill level.
8. Use the Adaptive Level 3 Development Log to prepare for your exam. You can download the development log for free. The development log is a tool for you to develop your skiing, teaching, and technical skills in preparation for your Level 3 exam. As you are preparing for your exam, include comments and notes you find beneficial. At the time of your exam, you will be required to turn in the development log for your examiner’s review. It will be returned to you after the exam so that you can use it as an ongoing resource. Please note: The outcome of your Adaptive Level 3 exam does not depend on how much you write on the log.

Exam Format

The Adaptive Level 3 exam is presented in a two-day format. The candidate is assessed on:

- Personal skiing and knowledge of common skills and movements as applied to that skiing;
- Technical knowledge encompassing alpine ski technique, basic racing, specialized equipment and adaptations, and a wide range of diagnoses; and
- Teaching knowledge in all specialties, as well as addressing skiers with single or multiple diagnoses, and coaching.

The candidate is evaluated by one examiner each day, receiving an assessment form from each examiner. The candidate must pass each day. There are no partial passes. Candidates must pass the online written test prior to attending the practical assessment.

Certificates and pin will be awarded on the second day after successful completion of the assessment.

Certified Level 3 members must maintain their membership by attaining 12 PSIA-RM-AASI approved CEU's every other year and by paying dues to the Association on an annual basis. They may hold committee seats and may hold a seat on the Board of Directors. They are entitled to full voting rights.

Approximate Daily Timing

Note: This is a sample agenda only. Each examiner sets a schedule based on weather, terrain, snow conditions and the candidates taking the exam.

7:30 – 8:00	Sign in. Collect professional development logs.
8:00 – 8:15	Introductions – People / Logistics / Exam format / Exam event / Group safety
8:15 – 9:00	Movement Analysis – Adaptive-specific video with worksheet and discussion
9:00 – 9:30	Open discussion: Use of fundamental mechanics, movement pools and skill blending involved in upper level skiing?
9:45 – 11:45	Skiing tasks on hill with discussion of tasks and movement
11:45 – 12:15	Lunch break
12:15 – 12:45	Technical discussions
12:45 – 3:45	Movement Analysis and teaching – scenarios, observation, and discussion
3:45 – 4:00	Address questions and concerns prior to finishing exam Summarize: Day 1 – Review day 2 schedule and equipment needed

Day 2 – Meeting place for results

4:15 – 5:30 Day 1 – Examiner documents assessment scores
 Day 2 – Examiner documents assessment scores and prepares result packets

Please plan accordingly to help utilize the time wisely. Have equipment (personal and adaptive) readily available and set for your use. If you are sharing adaptive equipment with anyone else, make sure that you know your personal settings so you can quickly set it up for yourself.

Functional Skiing & Technical Application Outcomes

Category I: Skiing

General

The candidate will be able to perform the following criteria and tasks in his/her personal skiing (or disability equivalent).

1. Ski dynamic parallel turns on all mountain terrain in all conditions.
2. Show appropriate skill blending on all mountain terrain except for the most extreme.
3. Reduce, generate, or maintain speed without interrupting overall rhythm and flow.
4. Maintain a consistent balanced stance.
5. Demonstrate a variety of exercises, tasks, and skill blends upon request.

Functional Skiing Tasks

The candidate is able to ski...

Pivot Slips on groomed harder blue to black terrain

Description: Link sideslips in a corridor of two ski-lengths or less, in both directions, connected by 180-degree pivots of both legs under a stable pelvis and upper body.

1. Keep the skis perpendicular to the fall line when slipping.
2. Bend skis from the center.
3. Ensure pivot occurs under the center of the foot.
4. Pivot skis simultaneously and at a constant rate.
5. Generate tipping movements from your feet and legs.
6. Tip/release the skis at the same time and rate.
7. Generate the turn from your legs, under a stable pelvis and upper body, promoting separation.
8. Use upper/lower body separation to direct pressure to downhill ski.
9. Make your flexion and extension movements progressive and keep your center of mass over your base of support.
10. Maintain a corridor of no more than two ski-lengths.

Bump Run without Poles on harder blue to black terrain

Description: Parallel ski a run of bumps without poles at a consistent pace and line. Display the ability to adapt your skiing and adjust your turns to meet the demands of varying terrain and snow conditions, possibly using fall line to GS-radius turns.

1. Display rhythmical, linked, parallel turns with the ability to read and adapt to terrain.
2. Maintain ski snow contact with appropriate movements.
3. Maintain speed control through turn shape.
4. Demonstrate effective tactical choices.

Short Radius Turns with Alternating Groups of Braking & Gliding Turns on easy black terrain

Description: Ski a series of linked turns that alternate between braking and gliding.

Display distinct groupings of braking and gliding turns with clean transitions.

1. Gliding turns allow the tips of the skis to move through the gravity zone, with snow spray throughout the arc of the turn.
2. Braking turns the tails of the skis move out of the gravity zone breaking the line of momentum with snow spray being greatest at the end of the turn.
3. Use turn shape to control speed.

Step Turns on black terrain

Description: A purposeful step turn for a quick directional change.

1. Display turns with a step to an edge prior to the fall line and steering through the arc of the turn.
2. Finish the turn with parallel skis.
3. Use an appropriately sized, uncontrived step to maintain balance and control.
4. Link turns with rhythm and flow.

Free Skiing on black terrain

Description: Ski a section of hill at your own pace and in your own personal style.

1. Display rhythmical, linked dynamic parallel turns, or disability equivalent, maintaining a balanced and centered stance.
2. Utilize ski design and skill blend to effectively create turn shape and navigate various terrain and conditions.
3. Use flexion/extension movements and pole swing to complement skill blend.
4. Use progressive movements to simultaneously steer the skis through the turn.
5. Control speed through turn shape, keeping the speed consistent for the entire run.

Milestone Demonstrations

The candidate is able to perform the appropriate maneuver in each stage of the progression in his/her personal skiing, as well as in all specialties.

The candidate will be able to demonstrate...

Wedge Turns on any green terrain

Description: Linked, entry level, basic offensive turns demonstrating fundamental principles of expert skiing, with skis in wedge orientation and on opposing edges throughout, due to very low speed, gentle terrain, and active leg steering.

1. Common principles of linked turns with offensive intent.

2. Speed, terrain, tactics, and movements relevant to typical first day skier – very slow and gentle.
3. Natural, functional, open stance without any exaggerated movements.
4. Consistent gliding wedge (converging skis, opposing edges) – natural, not forced.
5. Consistent, rounded, linked turns without traverse.
6. Gentle brushing (skidding) due to radius of turn being smaller than skis can carve (requires active leg steering).
7. No blocking or push-off movements.
8. Speed control generated from line – no braking.
9. No pole swing or touch.
10. Positive rotary movements:
 - a. Continuous active leg steering guides tips into turn;
 - b. No tail pushing;
 - c. Both legs rotate in the hip sockets simultaneously;
 - d. Inside ski lead and stacking; and
 - e. Lead change follows transition.
11. Positive edging movements:
 - a. Active tipping movements in feet and ankles;
 - b. No pushing or twisting to created edge angle; and
 - c. Turns begin with edge release of the downhill ski.
12. Positive pressure control movements:
 - a. Passive, partial weight transfer results from turn forces, not active movements toward outside ski and
 - b. Subtle fore-aft movements maintain balance over sweetspot.

Wedge Christie Turns on any green and blue terrain

Description: Linked, novice level, basic offensive turns that start with a wedge and finish parallel due to low speed and active leg steering – slightly faster and more intense than Wedge Turns.

1. Common principles of linked turns with offensive intent.
2. Speed, terrain, tactics, and movements relevant to novice skier (Levels 3 – 4).
3. Natural, functional, open stance without any exaggerated movements.
4. Skis open to gliding wedge following edge release.
5. Matching, caused by continued steering of inside tip, begins when inside ski rolls flat.
6. Consistent, rounded, linked turns without traverse.
7. Gentle brushing (skidding) due to radius of turn being smaller than skis can carve (requires active leg steering).
8. No blocking or push-off movements.
9. Speed control generated from line – no braking.
10. No pole swing or touch.
11. Positive rotary movements:
 - a. Continuous active leg steering guides tips into turn;

- b. No tail pushing;
 - c. Both legs rotate in the hip sockets simultaneously, although not necessarily at the same rate;
 - d. Inside ski lead and stacking; and
 - e. Lead change follows transition.
12. Positive edging movements:
- a. Active tipping movements in feet and ankles;
 - b. No pushing or twisting to created edge angle; and
 - c. Turns begin with edge release of the downhill ski.
13. Positive pressure control movements:
- a. Passive, partial weight transfer (60 – 80% outside ski) results from turn forces, not active movements toward outside ski and
 - b. Subtle fore-aft movements maintain balance over sweet spot

Basic Parallel Turns on smooth green or blue terrain

Description: Linked, low intermediate level, basic offensive turns demonstrating active steering, with skis consistently parallel and at similar edge angles throughout – slightly faster and more intense than Wedge Christies.

1. Common principles of linked turns with offensive intent.
2. Speed, terrain, tactics, and movements relevant to low intermediate skier (Level 5 – 6).
3. Natural, functional, open stance without any exaggerated movements.
4. Skis maintain parallel relationship, matching edge angles, and constant width.
5. Consistent, rounded, linked turns without traverses.
6. Gentle brushing (skidding) due to radius of turn being smaller than skis can carve (requires active leg steering).
7. No blocking or push-off movements.
8. Speed control generated from line – no braking.
9. Pole swing and touch enhance rhythm, flow, and timing.
10. Positive rotary movements:
 - a. Continuous active leg steering guides tips into turn;
 - b. No tail pushing;
 - c. Both legs rotate in the hip sockets simultaneously at the same rate;
 - d. Inside ski lead and stacking; and
 - e. Lead change follows transition.
11. Positive edging movements:
 - a. Active tipping movements in feet and ankles;
 - b. Maintain matching edge angles and tip and flatten skis as needed to shape and control line;
 - c. No pushing or twisting to created edge angle; and
 - d. Turns begin with edge release of the downhill ski.
12. Positive pressure control movements
 - a. Passive, partial weight transfer (60 – 90% outside ski) results from turn forces,

- not active movements toward outside ski and
- b. Subtle fore-aft movements maintain balance over sweet spot

Dynamic Parallel Turns on any groomed or recently groomed black terrain

Description: Linked, advanced level, offensive turns at consistent moderate to high speed, demonstrating high ski performance and unbiased skill blend with active steering – considerably faster and more intense than Basic Parallel.

1. Common principles of linked offensive turns.
2. Speed, terrain, tactics and movements relevant to advanced skier (Level 7 – 8).
3. Natural, functional, open stance without any exaggerated movements.
4. Intense forces allow high edge angles and strong carving, but not a railed-out carve.
5. Consistent, rounded, linked turns without traverse.
6. Skis brush (skid) slightly due to active leg steering needed for turn radius smaller than skis can pure- carve.
7. No blocking or push-off movements.
8. Speed control generated from line – no braking.
9. Pole swing and touch enhance rhythm, flow and timing.
10. Positive rotary movements:
 - a. Continuous active leg steering guides tips into turn;
 - b. No tail pushing;
 - c. Both legs rotate in the hip sockets simultaneously at the same rate;
 - d. Inside ski lead and stacking; and
 - e. Lead change follows transition.
11. Positive edging movements:
 - a. Active tipping movements in feet and ankles;
 - b. Maintain matching edge angles and tip and flatten skis as needed to shape and control line with maximum ski performance;
 - c. No pushing or twisting to created edge angle; and
 - d. Turns begin with edge release of the downhill ski.
12. Positive pressure control movements:
 - a. Passive weight transfer (up to 100% outside ski) results from turn forces, not active movements toward outside ski;
 - b. Both skis remain on snow and involved in shaping turn; and
 - c. Refined fore-aft movements maintain balance over sweet spot.

Category II: Teaching Knowledge and Application Outcomes

Knowledge

The candidate will be able to...

1. Describe how to connect to the learner, use a variety of teaching styles in a lesson and how to identify and address different learning styles (preferences) in an individual or group lesson.

2. Discuss how to integrate Your Responsibility Code and Smart Style safety program into lessons through Level 9.
3. Discuss the following elements pertaining to teaching and learning and how each element may affect a student's learning experience:
 - a. Parameters for effective teaching;
 - b. Teaching for transfer;
 - c. Feedback;
 - d. Pacing;
 - e. Lesson content engaging the learner; and
 - f. The use of creative learning environments and activities.
4. Describe the different diagnoses commonly encountered in adaptive skiing and effects the diagnoses may have on learning and skiing.
5. Discuss various ski racing opportunities appropriate to the diagnosis

Application

The candidate will be able to...

1. Demonstrate an in-depth evaluation of any adaptive skier, including an assessment of strength, mobility, range of motion, sensory systems, and communication.
2. Teach any guests with a disability through Level 9 and be able to quickly move back and forth among the adaptive specialties as well as beginning ski racing.
3. Utilize effectively all parts of the Learning/Teaching Cycle in lessons through Level 9.
4. Demonstrate strong guiding, tethering, and communication techniques on any appropriate terrain on the mountain.
5. Individualize all lessons by building trust, engaging in the use of creative learning environments, and utilizing a variety of teaching styles, methodologies, and other strategies.
6. Use the concept of lateral learning at all levels and with any student with a disability to enhance skill development and application and to improve performance and versatility.
7. Use various forms of reinforcement, practice, pacing, and feedback to create an optimal learning environment.
8. Describe and exhibit safety practices, recognize and address hazards of the mountain environment, and identify risk and strategies for minimizing it.
9. Create and maintain an environment that not only fosters a comfortable learning pace but also accommodates any special requirements of students.

Category III: Technical Knowledge and Application Outcomes

Terminology

The candidate will be able to...

1. Discuss all terminology and skiing related concepts from the *Alpine Technical Manual* (PSIA-AASI), *Adaptive Alpine Technical Manual* (PSIA-AASI), *Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement* (PSIA-AASI) and *Teaching Snowsports Manual* (PSIA-AASI). Demonstrate understanding through skiing performance.
2. Relate specific skiing terminology to students through use of simple language and by relating the

terminology to feelings and achievable movements.

3. Discuss all medications categories, what they are used for, and their potential side effects.
4. Discuss types and severity of diagnoses, including multiple diagnoses, and their effect on the guest's performance.

Equipment

The candidate will be able to...

1. Describe in detail all adaptive equipment, their differences, analyze how it functions, prescribe appropriate modifications for different disabilities, including multiple disabilities, through Level 9 and discuss its safe application.

Disability Understanding

The candidate will be able to...

1. Discuss thoroughly and analyze various diagnoses, including physical, cognitive, communicative, and mental disorders. This may include multiple diagnoses present in one student.
2. Describe medications in depth and their side effects on students while skiing.
3. Relate how disabilities and medications can affect ski techniques.
4. Demonstrate knowledge, understanding, and application of safety practices for students based upon their diagnoses and equipment used in lessons

Ski, Demonstrate, and Teach the Adaptive Specialties

The candidate will be able to ski and demonstrate all the adaptive specialties (or disability equivalent)...

1. Visual impairments: Guide on all terrain, in all conditions.
2. Cognitive or developmental disabilities: Coach on all terrain, in all conditions.
3. Mono-ski: Ski to Level 5 or better.
4. Bi-ski: Ski to Level 5 or better.
5. 3-Track: Ski to Level 8 or better.
6. 4-Track: Ski to Level 8 or better
7. All specialties: Teach to Level 9
8. Entry level racing concepts and skill development activities.

Skiing Movements / Skill Development and Movement Analysis

The candidate will be able to...

1. Use his/her own system to perform movement analysis. This system should be based on an understanding of various movement analysis models. The instructor will be given blank paper for the movement analysis; in lieu of a form to complete.
2. Describe skill blending in skiing, how it relates to different situations, terrain, snow conditions, and contemporary concepts that support ATS. Discuss the similarities and differences in teaching in each specialty.
3. Describe how skill blending relates to different situations and conditions. Relate skill blending to

the different populations and levels of skiers (e.g., adaptive skiers, seniors, women, children, and top athletes).

4. Relate skill blending to various internal and external forces generated in a variety of skiing situations.
5. Describe the basic movement patterns in your own skiing and all specialties through Level 9.
6. Describe cause-and-effect relationships as related to skill usage, in different phases of the turn, in skiers in each specialty through Level 9.
7. Describe developmental skill needs, by priority, for each specialty through Level 9.
8. Prescribe exercises and tasks which target any students' needs, and which should improve their performance.
9. Incorporate a variety of ideas into the lesson plan in case some of the ideas do not work for the student.

PSIA Fundamentals of Alpine Skiing

Remain consistent through all levels of certification. The performance criteria will vary based on the application to common beginner, intermediate and advanced zone outcomes.

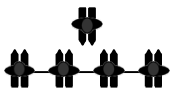
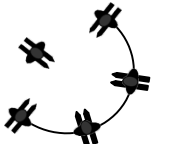
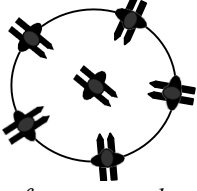
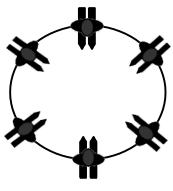
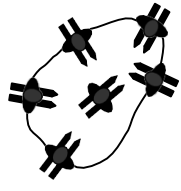
1. Control the relationship of the center of mass to the base of support to direct pressure along the length of the ski.
2. Control the pressure from ski to ski and direct pressure toward the outside ski.
3. Control edge angles through a combination of inclination and angulation.
4. Control the skis rotation (turning, pivoting, steering) with leg rotation, separate from the upper body.
5. Regulate the magnitude of pressure created through ski/snow interaction.


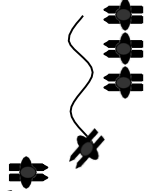

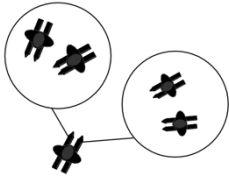
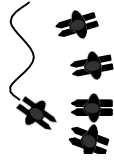
Multiple Intelligences

	Characteristics	Tips for Teaching & Coaching
Verbal- Linguistic	<ul style="list-style-type: none"> • Word-smart • Skilled with words and language • Enjoys reading, talking, and listening to stories • Can explain things clearly • Likes tongue twisters, rhymes, & puns 	<ul style="list-style-type: none"> • Encourage students to write notes • Ask students to verbalize skiing techniques & to summarize instructions • Suggest books that students can read to learn more about skiing
Logical- Mathematical	<ul style="list-style-type: none"> • Logic-smart or Numbers-smart • Often asks “why” and “how” • Easily recognizes patterns • Follows logical steps • Skilled in analysis & logic • Enjoys solving problems or puzzles 	<ul style="list-style-type: none"> • Arrange lesson in a logical, orderly sequence Explain cause & effect relationships (e.g., the tipping motion puts the ski(s) on edge) • Count out turns to help develop a smooth skiing rhythm • Set up “what if” experiments during the lesson
Visual- Spatial	<ul style="list-style-type: none"> • Picture-smart • Has an active imagination • Sensitive to the balance and organization of shapes and objects • Likes to design, draw, & organize • Very aware of colors in environment 	<ul style="list-style-type: none"> • Give accurate demonstrations • Use “follow-me” teaching methods • Use metaphors to communicate ideas • Use video or pictures to show students their own skiing • Encourage the use of visualization techniques
Bodily- Kinesthetic	<ul style="list-style-type: none"> • Body-smart • Is well coordinated • Seems to be in perpetual motion • Enjoys working with hands • Needs to touch things to learn about them • Frequently uses gestures to communicate • Thrives on stimulating physical experiences 	<ul style="list-style-type: none"> • Spend more time skiing than talking • Use teaching for transfer to communicate kinesthetic ideas, such as body position • Ask students what they are feeling in specific body parts • Practice new skills instead of talking • Suggest write notes (writing is a kinesthetic activity & helps clarify thoughts)
Musical- Rhythmic	<ul style="list-style-type: none"> • Music-smart • Has a good sense of rhythm and/or melody • Sensitive to the emotional power of music • Easily remember songs • Has a pleasant singing or speaking voice • Frequently listens to music and may play a musical instrument 	<ul style="list-style-type: none"> • Encourage the development a consistent rhythm & flow by humming a song while skiing • Tap a rhythm with ski poles while skiing • Use sounds to differentiate movements (e.g., for shorter turns, think zhat, zhat, zhat; for longer turns, think zhaaaa, zhaaaa, zhaaaa) • Create simple rhymes or songs to teach concepts
Interpersonal	<ul style="list-style-type: none"> • People-smart • Adept in social situations • Easily discerns the emotional states of others and responds appropriately • Persuasive as a negotiator or leader • Feels comfortable in a crowd 	<ul style="list-style-type: none"> • Take lots of breaks and socialize • Make the lesson fun • Do activities with partners or groups • Use chairlift time to socialize with other skiers
Intrapersonal	<ul style="list-style-type: none"> • Self-smart • Enjoys solitude • Thinks a lot • Understands own strengths & weaknesses • Easily sets personal goals • Independent-minded 	<ul style="list-style-type: none"> • Allow time for reflection on chairlift • Encourage students to trust their intuition when discovering effective movements • Find out why skiing is important to students • Work with students to create skiing goals • Provide follow-up exercises or focus point for skiing on their own

Class Handling

At Adaptive Level 3, you may be expected to teach individual or group lessons. For example, you may have a group of mono skiers or 3-track skiers, or a mix of the two. This chart displays some of the most common group arrangements.

Arrangement	Advantages	Challenges
<p>Line-up</p>  <p><i>Students stand next to each other in a row and face the instructor</i></p>	<ul style="list-style-type: none"> • Formal arrangement • Best used in narrow areas on the slopes • May be better for some learners in preliminary instruction 	<ul style="list-style-type: none"> • May be too formal as the lesson progresses
<p>Semicircular</p>  <p><i>Students form a semicircle around the instructor</i></p>	<ul style="list-style-type: none"> • Provides good visual contact • Slightly less formal than line-up • Students feel closer to one another 	<ul style="list-style-type: none"> • May still be too formal as the lesson progresses
<p>Circle around the instructor</p>  <p><i>Students form a complete circle around the instructor</i></p>	<ul style="list-style-type: none"> • Provides good visual contact • Slightly less formal than a line-up • Allows instructor to be close enough to each student to offer assistance • All the students can observe the instructor 	<ul style="list-style-type: none"> • Instructor must change direction often allowing all students have a good view • Limited view of the instructor's face can diminish rapport • Students behind the instructor may have a hard time hearing • Need a space large enough for the circle without obstructing other skiers
<p>Instructor within the circle</p>  <p><i>Instructor joins the students in the circle</i></p>	<ul style="list-style-type: none"> • Establishes a sense of camaraderie between the instructor and students • Supports less assertive students • Encourages student communication 	<ul style="list-style-type: none"> • Instructor must remember to direct attention to all students, particularly those right next to the instructor • Need a space large enough for the circle without obstructing other skiers
<p>Huddling up</p>  <p><i>Students gather around the instructor in a huddle</i></p>	<ul style="list-style-type: none"> • Promotes unity among students and the instructor • Enhances excitement about skiing by harnessing the shared energy of the students • Allows larger groups to hear the instructor • Helps students stay warm • Uses less space than a circle 	<ul style="list-style-type: none"> • Less assertive students may always be left on the outer rim of the huddle • Remind everyone to speak up so that they can be heard, especially with larger groups

Arrangement	Advantages	Challenges
<p>Follow me</p>  <p><i>Students ski behind instructor</i></p>	<ul style="list-style-type: none"> • Good technique for moving a class from one place to another • Provides a measure of safety when the terrain is hazardous • Helpful when the path of descent over particular terrain enhances the learning process • Can ingrain a particular movement pattern 	<ul style="list-style-type: none"> • May not be the safest choice in dense traffic • May not work well when students are learning a new skill • Does not promote students' decision-making processes • Not effective on challenging terrain
<p>Call-down</p>  <p><i>Students ski down to instructor one at a time</i></p>	<ul style="list-style-type: none"> • Good assessment tool • Easy to observe and critique individual skiers • Works well when class members support one another • Students can learn from receiving individual feedback, as well as observing others 	<ul style="list-style-type: none"> • May intimidate shy or self-conscious students • Does not work well when there is tension among students • Limits skiing time when you have a large group
<p>Free practice</p>  <p><i>Instructor states the focus & students ski without further direction until meeting at a predetermined landmark</i></p>	<ul style="list-style-type: none"> • Allows instructor to give mini-lessons for students who need extra input • Can be effective when you have students with varying levels of skill, speed, and endurance • Subtle way to allow tired students to take a break without disrupting the rest of the class • Promotes self-discovery 	<ul style="list-style-type: none"> • Can be chaotic if instructor does not have good control of the class • Everyone must be familiar with the pre-determined landmark • If the landmark is far away, be sure to establish a plan if someone gets lost • Effective follow-up discussion is needed to cement what has been learned by the students
<p>Micro-teaching</p>  <p><i>Instructor conveys the focus and students break into smaller practice groups</i></p>	<ul style="list-style-type: none"> • Allows instructor to focus on students who need extra attention • With proper pairing, it may be less intimidating for shy students • Teaching or giving feedback to another student can clarify a student's understanding of the subject • Can be a great team-building exercise 	<ul style="list-style-type: none"> • May not be effective with inexperienced students • May not work well when there is tension among students
<p>Demonstration</p>  <p><i>Instructor states the focus and demonstrates the maneuver to the students</i></p>	<ul style="list-style-type: none"> • Ideal for visual learners • Reinforces desired skiing image <p>Note: When demonstrating both ineffective and effective techniques, be sure to end the demonstration with the effective technique</p>	<ul style="list-style-type: none"> • Not as helpful for auditory or kinesthetic students • Not effective if instructor does not display proper technique • Can limit the students' skiing time if over-used

Movement Analysis Filter

Skis Performance “Effect”	Body Performance “Cause”	Description “Where, What & How”		
		Transition / Initiation	Shaping	End / Finish
Bend (Pressure)	Flexion /Extension (Pressure Control Movements)			
Fore/Aft	Front/Back			
Ski/Ski	Foot/Foot			
Maintenance/ Change	CM Closer to/farther from Skis			
Twist (Rotary)	Turning (Rotary) Movements Rotation, Counter Rotation, Feet & Leg Turning, Outside Force			
Edge (Edge)	Tipping (Edging) Movements CM moves laterally relative to base CM does not move laterally			

DIRT – “How”

Duration

the length of time something continues or exists

Intensity

magnitude, as of energy or a force per unit of area, volume, time, etc.

Rate

degree of speed, progress, etc. Pace.

Timing

the sequential relations that any even has to any other, as past, present or future

Step 1: Describe the skis’ performance in a specific location of the turn.

Step 2: Describe the body parts and their specific movements in that specific location of the turn that creates the skis’ performance

Step 3: Construct Cause & Effect Relationships (4) and describe how they affect skier’s balance/stance throughout turn.

Worksheet

Ski Performance ↔ Body Performance in Phases of Turn

		Transition/Initiation	Shaping	Finish/Transition
Fore/Aft		↔	↔	↔
Pressure	Ski/Ski	↔	↔	↔
Maintain		↔	↔	↔
Rotary		↔	↔	↔
Edge		↔	↔	↔

Guest Centered Teaching (GCT)

Guest centered skiing and snowboarding lessons are positive skiing and riding experiences. By understanding the basic needs of your students and fulfilling those needs, you can create the most positive learning experiences possible.

Most successful instructors have something in common: they consistently exceeded their students' expectations! This is because they pay close attention to all of the needs of their students, both spoken and unspoken. These successful instructors understand that 70% of communication is non-verbal and they look and listen for clues as they formulate a plan for each individual.

As an instructor, you also need to be conscious of your own desires and agendas—these personal desires or agendas can minimize your capacity to meet your guest's needs.

Your Guest

Your students bring a variety of needs to a lesson. They may need to stay warm and safe; know about pole use; look good; not work so hard or keep up with a friend or loved one. Your students' needs fall into one of these three categories:

- Motivational Needs
- Understanding Needs
- Movement Needs

Fulfilling **Motivational Needs** is the most powerful thing you can do to create a positive experience and yet Motivational Needs can sometimes be the most challenging for you to meet. Perhaps this is because of the intensely personal nature of what motivates an individual. While there are times when Motivational Needs are the same as movement and understanding needs, they may also be the underlying reason for the Movement and Understanding Needs. Occasionally, Motivational Needs have nothing to do with the Movement and Understanding Needs; perhaps a student merely desires company or an orientation to a new part of the mountain.

Understanding Needs include a student's awareness and understanding of his/her current ability or inability. Working in this category offers you an opportunity to clear up misunderstandings. It also allows you to relate what the student is learning to his/her other GCT needs.

Movement Needs are the most technical aspect of GCT. Through movement analysis, you must first discover which movements are hindering your student's skiing/snowboarding performance and then determine the single most important movement (SMIM), which will improve his/her experience. After s/he has become proficient in that SMIM, you can then select the next SMIM which will improve his/her experience. You also need to remember that movement needs can be impacted by the student's equipment, so make equipment adjustments as necessary throughout the lesson.

Keep in mind that while most students describe Movement Needs as the reason for taking a lesson, they are generally only on the surface of the deeper Understanding and Motivational Needs.

Instructor Behavior

Identification Activities help you determine the needs of your students. The foundation of a positive skiing/snowboarding experience rests on your ability to accurately identify their Motivational, Understanding, and Movement Needs. You can identify these needs by asking questions, making observations, and verifying any assumptions.

Facilitation Activities are your lesson planning activities, which include anything you do or say in response to an identified need. They can be as simple as answering a question, going in to warm up, explaining a new task or just plain skiing/riding a lot! What is most important for your students determines the activities you choose.

Teaching for Transfer

The concept of teaching for transfer simply means students can transfer previously learned knowledge or skills to new learning or situations. It is easily done if the old learning and new learning are the same or similar. For example, an ice skater has more skills that are similar to skiing than a tennis player does. Realize this does not negate the skills of the tennis player; they are just not as easily transferred.

Students transfer learning in positive and negative ways. Positive transfer occurs when a previously learned skill is successfully applied to a new setting. For the ice skater, the ability to roll the foot to the inside edge of the skate would help to learn sidestepping. In the same way, the ability to roll an ankle while sidestepping can help if students feel their ankles roll to control edging while turning.

Negative transfer refers to some previous learning or movement pattern hindering the learning of a new movement. For a tennis player who always prepares for movement by standing on the balls of the feet getting used to using the whole foot may be difficult. Or, someone who has learned to sidestep but can only put the ski on edge in a particular manner, rather than actively moving the ski onto an edge, may find a ski railing to the point where turn shape cannot be controlled.

Instructors can facilitate transfer by understanding the mechanical elements of adaptive skiing. This enables them to create appropriate exercises to stimulate known movement patterns that can be applied to skiing movements. Without understanding the mechanical elements of what is being taught, it is easy to work through a set of progressions or tasks that hinder transfer or set students up for negative transfer. Also, by teaching the common elements of skiing at lower levels one can transfer those skills to upper levels.

Consciously teaching for transfer can increase success with students at all levels of skiing and with all different types of disabilities. An example is a student with an intellectual disability who does not like new things. By utilizing known skills and movement patterns at least some of the fear and discomfort can be allayed.

Remember, the skills taught in skiing may be used in a future lesson or in some other facet of the students' life.

Guidelines in Teaching for Transfer

1. Create training, practice situations, and/or skill use that are similar to those needed in applied settings.
2. Provide lateral practice in related tasks before transferring to new situations.
3. Watch for negative transfer and address it immediately if it appears.
4. Build from simple to complex.
5. Always supply a wide variety of concrete experiences so new learning is anchored.
6. Provide appropriate feedback during the learning session and reinforce new behaviors.
7. Engage students in discussion and interaction during the learning process. Check for understanding.
8. Be sure that students are ready to learn or transfer learning. Moving too quickly during the learning process can hinder positive transfer.

Seven Parameters for Effective Learning

The Learning Partnership is at the core of the teaching cycle. One way to help build and strengthen the partnership is by employing the Seven Parameters for Effective Learning to help an instructor formulate a teaching strategy.

1. Teaching Style

Take time to discover the learning preference of students. Tailor the lesson to their styles without ignoring the others. Remember humans learn best with information processed through a multitude of senses.

2. Amount of Information

Some people process a lot of information at one time, some only a little. Therefore, give those who can process low amounts of information only one thing to do and more to those who can process more.

3. Feedback and Reinforcement

Not everyone learns by getting positive feedback. Some people relate to negative feedback better than positive feedback. In fact, they constantly ask what they have done wrong! If this is the case, tell students what they are doing wrong. If students are a positive feedback learner focus on what is being done correctly and work on bringing other movements in line with that. Some people like an equal amount of negative and positive feedback. A good rule of thumb is to use the PNP rule; give positive feedback first, then negative, followed by positive.

4. Interpersonal Control

Some people like to control every situation, others are happy to roll with the punches. Once instructors get a feel for the students, create a tone that promotes a positive learning environment. For example, children's instructors might need to be high control while a private lesson with a high-powered client may call for looser control. Matching amounts of control with the personality of the students helps the lesson be more successful.

5. Process vs. Outcome Orientation

Do students want to get to the result right away or are they happy mastering each little step recognizing all the small gains the steps signify? Outcome-oriented learners desire end results. They must be shown how the process will eventually meet the outcome. They need broad goals with lots of experiential learning rather than lots of little exercises. Process-oriented learners need to know every little piece of what they are doing. They ask lots of questions. They seek depth and understanding along with experience. They have the patience to get to an overall goal one step at a time.

6. Attention, Concentration, Distractions

Everyone has issues that can detract from their learning environment. Attention may be short, unfocused, or students may be distracted, for example, on a crowded run. Students may become so focused on the task at hand that they are not aware of what and who is around! Some students get distracted with internal self-talk that can be either positive or negative. Take notice of each student's attention span, distractions, motivation, confidence, intensity, and focus. The learning capacity of your students should pace the lesson.

7. Teach from the Heart

Show students you care about them and their experience. Be honest, empathetic and caring.

Pacing

The orchestration of lesson activities with respect to your student's energy level is called pacing. It is critical for keeping your students motivated and safe. Here are some considerations for pacing an adaptive lesson.

Energy Peaks

Typically, students reach their energy peaks at mid-morning and mid-afternoon. They also tend to experience energy drops before lunch and at the end of the day. Find out when energy peaks occur for your students. Energy may be based upon diagnosis, medication, sleep, or other factors. Take advantage of energy peaks to ski challenging runs. Similarly, avoid taking students on the hardest run when their energy has ebbed, such as right before lunch or at the day's end.

Food

Be aware of hunger-induced energy drops before lunch and at the end of the day. Students may also be slow to warm up after lunch as food is digested. Some students in adaptive lessons may have diagnoses that affect metabolism or blood sugar levels such as diabetes. Ask about energy related to diagnosis, sleep, or medications during the student assessment and encourage students, especially those with blood sugar issues, to carry a healthy snack during the lesson.

Terrain

Skiing the most challenging terrain all day can be exhausting while restricting students to easy terrain can bore them. Be sure to vary terrain throughout the day according to goals, activities, energy, and desire.

Altitude

If teaching at a high elevation resort, remember students from low-elevations areas, regardless of their ability, will fatigue more easily than usual. Pace the lesson accordingly and remind students to drink lots of water.

Weather

Cold temperatures and high winds can tire out a person, especially someone coming from a warmer climate. Make sure students are dressed appropriately for the weather and be prepared to take more breaks when the weather is especially cold and/or windy.

Skiing Multiple Days

Students who lead otherwise sedentary lifestyles may tire when skiing for a full day or multiple days. Encourage students to get plenty of sleep and possibly take a day off if they are feeling especially tired.

Diagnosis

Remember that a student's diagnosis can impact strength and stamina. If students become overly fatigued, it may impact their energy level for many days. Check student energy level regularly to avoid exhaustion.

Mood

You can help manage your student's mood by varying the intensity of the lesson. Be sure to include both easy and challenging runs and mix learning activities with fun activities. Keep the lesson atmosphere emotionally safe.

Restlessness

Students will let you know if the lesson is moving too slowly. Look for signals that indicate students are getting restlessness, such as pole tapping, shuffling feet, or looking around at passing skiers.

Signs of Fatigue

Beware of fatigue throughout the lesson. Signs could include lack of concentration, more falls than usual, or a marked drop in performance.



Feedback

When done correctly, feedback can reinforce positive change and redirect unproductive movements or actions in your guests. The five P's are easy to remember guidelines for giving feedback.

Personal contact

Have you gotten to know your students? Have you developed rapport and built trust? Until you have developed this personal connection, then may not be willing to accept feedback from you.

Permission

Have you asked your students for permission to give feedback? Did you check to see if they want a warm-up run before you start giving feedback? Unwelcome feedback will only alienate students—it will not further the lesson.

Private vs. public

This is especially important for group lessons. Some people do not mind if you give them feedback in front of others; some people prefer to get the feedback one-on-one. This is also something to keep in mind for children. Are they comfortable getting feedback in front of their parents? Of course, feedback on safety issues should always be shared with parents.

Preference

How do your students want to receive feedback? Do they want you to tell them immediately when you see ineffective movements? Or would they prefer you save your feedback for the chairlift or the end of the day? Do they want you to give a detailed analysis or cheer them on when doing well? Your students may tell you some preferences and as you get to know them better, you may also notice what works best for them.

Paraphrase

Do you know if your students understand your feedback? You can ask them to paraphrase it to be sure.

Progression Development Worksheet

Progressions and exercises used for one guest can easily be adapted for another, whether those students are receiving an adaptive lesson or not, thus greatly expanding one's ability to apply their experience to a magnitude of situations. This worksheet is designed to increase your understanding and application in this area. Start by working with the specialty that is most comfortable. Then decide on a performance outcome, such as "learn to ski bumps." Write the performance outcome at the top of the worksheet. Next, figure out the body mechanics needed to provide that outcome. Then write down a progression you can use to accomplish the desired outcome. Lastly, adapt that progression to each specialty and see just how little it may change. Changes may be in the body mechanics due to guest profile or the presentation, but the ultimate outcome should be the same.

Performance Outcome:								
		<i>Able-Bodied</i>	<i>Mono-Ski</i>	<i>Bi-Ski</i>	<i>3-Track</i>	<i>4-Track</i>	<i>Cognitive</i>	<i>VI</i>
Effective Body Mechanics	<i>Stance</i>							
	<i>Edging Movements</i>							
	<i>Rotary Movements</i>							
	<i>Pressure Control Movements – Fore/Aft</i>							
	<i>Pressure Control Movements – Foot to Foot</i>							
	<i>Controlling Magnitude of Pressure</i>							
<i>Progression</i>								

Coaching

While the lines between teaching and coaching are often blurred, they are two distinct and valuable skills to develop as an adaptive ski instructor. Teaching is showing or telling students how to do something they did not already know.

Coaching is allowing students to learn based on what they already know and providing critical guidance only when necessary. A teacher imparts knowledge and skills; a coach acts as a clear, non-judgmental mirror that reflects what really happens in the student's efforts.

The Presuppositions of Adaptive Coaching

The following list is based on the presuppositions of NLP, originally developed by Alfred Korzybski. They are called presuppositions because you pre-suppose them to be true. If you like the results, continue to act as if they are true. Please note that this is **NOT one more list for you to memorize**. Instead, use it as a basis for developing your own coaching philosophy.

- 1. People respond to their experience, not to reality itself.**
Students cannot change reality but can change how they see life (worldview). Coaching is about noticing the worldview and when that worldview is self-defeating, offering students alternative views.
- 2. Always respect the other person's model of the world.**
Every individual has his/her own set of assumptions and beliefs. You do not have to agree with those assumptions and beliefs, but it is essential that you respect them.
- 3. Having a choice is better than not having a choice.**
Always structure your lessons with options so that if one plan does not work, you can try another. Remember, if whatever you are doing is not working, do something else.
- 4. People always make the best choices available to them at the time.**
If students adopt a certain behavior or movement, it is because once upon a time it worked. It may or may not work now. A good coach offers students more effective behaviors and movements.
- 5. There is no such thing as failure. There is only feedback.**
Every result gives you information. Sometimes your result is success and other times it is a real-life demonstration of how not to do something. As an adaptive coach, it is important for you to help students analyze the feedback and discover what is working and what is not working. Then you can form a new plan of action and try again. It is also critical for you to help students separate their results from their identity. Otherwise, their self-esteem can be hurt by the feedback.
- 6. The meaning of your communication is the response that you get.**
Remember that you cannot not communicate—you are always communicating by what you say, what you do not say and by a host of non-verbal signals. However, the response you get may be different than the one you wanted, so you need to be constantly aware of students' responses to your communication and adjust accordingly.
- 7. Mind and body are indivisible parts of the same system.**
Mind and body interact and mutually influence each other. It is not possible to make a change in one

without the other being affected. When we think differently, our bodies change and when we act differently, we change our thoughts and feelings. As an adaptive coach, be on guard for negative thinking, which can adversely impact students' performance and how their body responds.

8. We process all information through our senses.

As an adaptive coach, help students develop their senses so they become more acute. What do you see happening to your knees when you make a turn? Where do you feel the tipping movement? What do you hear that indicates we are near the chairlift?

9. Modeling successful performance leads to excellence.

Identify the components and strategies of an excellent skier and teach them to your students.

10. Anything can be accomplished when the task is broken down into small enough chunks.

Structure your lesson so that the goal is divided into pieces that are of manageable size for students.

11. We are all in charge of our own minds and therefore our results.

While students may not be able to control a given situation, they can control how they respond to that situation. Help them make effective choices.

12. Genuine understanding only comes from experience.

The learning is in the doing, so spend less time talking and more time skiing!

Diagnoses, Medications Body Mechanics, and Racing Information to Study

Adaptive instructors are expected to know a wide variety of diagnoses and associated adaptive ski equipment, techniques, and medications. You may be tested verbally on the following disabilities and medications throughout the course of your Level 3 exam or as part of your written exam.

Diagnoses

The following diagnoses are those most frequently seen in adaptive skiing. It is expected that your knowledge of these diagnoses is deeper than that of Level 1 or Level 2 adaptive instructors and that you understand the impacts of multiple diagnoses on a student. Your knowledge of these diagnoses should include but is not limited to:

1. Symptoms
2. Common causes and prognoses
3. Special considerations for skiing
4. How the diagnosis affects body mechanics and a person's ability to ski
5. Adaptive equipment that may be used for the guest with the diagnosis
6. Classes of medications and other treatments that are commonly used in treatment of the diagnosis
7. Assessment processes for guests with specific diagnoses
8. Possible learning and teaching styles for a guest with a specific diagnosis

- | | | |
|---|--------------------------|--------------------------------|
| •Alzheimer's disease | •Diabetes | •Muscular dystrophy |
| •Amputation | •Diabetic retinopathy | •Myasthenia gravis |
| •Attention deficit/hyperactivity disorder | •Down syndrome | •Myopia |
| •Autism spectrum disorder | •Epilepsy | •Neuromuscular disease |
| •Balance impairment | •Fetal alcohol syndrome | •Paralysis & Paresis |
| •Brain injury | •Fragile X syndrome | •Poliomyelitis |
| •Cancer | •Friedreich's ataxia | •Post-polio syndrome |
| •Cataracts | •Glaucoma | •Posttraumatic stress disorder |
| •Cerebral palsy | •Hemiplegia | •Retinal detachment |
| •Cerebrovascular accident | •Intellectual disability | •Retinitis pigmentosa |
| •Cognitive disability | •Learning disability | •Sensory processing disorder |
| •Congenital anomalies of hip/leg/foot | •Light damage | •Spina bifida |
| •Corneal disease | •Lupus | •Spinal cord injury |
| •Developmental disability | •Macular degeneration | •Strabismus |
| | •Multiple sclerosis | |

These diagnoses are also seen, though sometimes less frequently, but still likely to be encountered at some point, especially by Level 3 instructors. Candidates are expected to have basic knowledge of

these diagnoses, including symptoms and the special considerations for skiing.

- Albinism
- Amblyopia
- Amyotrophic lateral sclerosis
- Ankylosing spondylitis
- Aphasia
- Apraxia
- Arthritis
- Arthrogyrosis
- Asthma
- Astigmatism
- Burns (including chemical)
- Charcot-Marie-Tooth disease
- Chronic traumatic encephalopathy
- Cystic Fibrosis
- Cystic fibrosis
- Dementia
- Diplopia
- Deaf or hard of hearing
- Dwarfism
- Dysarthria
- Dyslexia
- Dyspraxia
- Edwards syndrome
- Emotional behavioral disorder
- Guillain-Barré syndrome
- Hemianopia
- Huntington's Disease
- Hyperopia
- Neurocognitive disorder
- Neurodevelopmental disorder
- Neurological impairment
- Non-verbal learning disorder
- Ophthalmoplegia
- Parkinson's disease
- Rett syndrome
- Spinal muscular atrophy
- Tumor
- Tunnel vision
- Vascular disease

Medications

The following classifications of medicines are commonly used to treat the disabilities listed previously. For each category of medication, you should know the uses and side effects. You are not expected to know specific brand names for each classification of medicine.

- Analgesics
- Anti-anxiety
- Antibacterial
- Antibiotics
- Anticholinergics
- Anticoagulants
- Anticonvulsants
- Antidepressants
- Antidiabetics
- Antiemetics
- Antihypertensives
- Anti-inflammatory
- Antimalarials
- Anti-Parkinson's
- Antipsychotics
- Antispasmodics
- Chemotherapy
- Diuretics
- Gold treatments
- H2 Blockers
- Immunosuppressive
- Psychostimulants
- Sedatives
- Stool Softeners

Human Anatomy and Body Mechanics

You are expected to have a rudimentary knowledge of human anatomy and body mechanics. You can find an explanation of basic human anatomy in PSIA's *Alpine Technical Manual*.

You are expected to understand vision terms (acuity, depth of perception, field of vision, legal blindness, and tunnel vision) and be able to describe how the eye works as well as hearing related considerations. This information is available in PSIA's *Adaptive Alpine Technical Manual*.

Racing for Adaptive Skiers

Racing can be an activity used for everyday fun, motivation, reward, and skill building and for competitive minded skiers. A variety of racing opportunities exist and may vary between resorts or from region to region and could include nationally governed programs, Masters, collegiate, high school, town

or resort race series. Athletes can race in an inclusion setting in able-bodied programs or compete in specific programs for adaptive skiers. Learn about the rules, classifications, coaching resources, and events of the racing programs listed below at their associated websites:

Paralympic Alpine Ski Racing	http://www.paralympic.org/alpine-skiing
Special Olympic Alpine Ski Racing	http://www.specialolympics.org/our-work/sports/alpine-skiing
NASTAR Alpine Ski Racing	http://www.nastar.com/
USSA	usskiandsnowboard.org/

Practice Scenarios

Pick one guest profile and one teaching scenario. Do an assessment and then set a plan to help the guest acquire the skills to reach their goal. This is by no means an exhaustive list of disabilities or possible teaching scenarios. Combine various profiles and scenarios to create practice lessons and apply information asked in the Questions section below.

Guest Profiles

1. 52-year-old male. Diabetic, right foot amputation, and blind.
2. 22-year-old male. Frontal lobe injury from gunshot wound one year ago in a gang encounter.
3. 61-year-old female. Severe arthritis in hips and knees and post-polio syndrome.
4. 17-year-old female. Spina bifida. Walks upright using swing-through gait. Wears polypropylene AFO's and has sores on her right calcaneus.
5. 42-year-old female. Right BK and PTSD due to assault. Wants to ski wearing her prosthesis.
6. 38-year-old male. Retired NASCAR driver. C5-6 complete quad from a race crash. Asthma. Has just returned home from hospital after care for pressure sores on his left ischium.
7. 28-year-old male. Right BE left AK from an electrical accident.
8. 39-year-old female. MS and retinitis pigmentosa.
9. 7-year-old male. Severe ADHD and a seizure disorder.
10. 27-year-old male. T11-12 SCI and closed brain injury. Acquired injuries in the military due to a roadside bombing.
11. 40-year-old male . Significant vision and hearing loss.
12. 18-year-old male. Spina bifida, learning disabilities, and uses a mono-ski.
13. 31-year-old male. Highly decorated fire fighter who acquired incomplete quadriplegia from a fall at work.
14. 12-year-old female. Rett syndrome, non-communicative, and stand skis.
15. 70-year-old male. Parkinson disease and a life-long alpine ski instructor.
16. 32-year-old female. Cerebral palsy with dysarthria. Lives independently and uses a walker or wheelchair for ambulation.
17. 64-year-old male. Hemiparesis and receptive aphasia due to stroke.
18. 16-year-old female. Down syndrome and strabismus. Overweight and wants to gain confidence.
19. 19-year-old female. Deaf and epilepsy.
20. 13-year-old male. Charcot-Marie-Tooth disease.

Teaching Scenarios

1. Skis blues with consistent medium radius turns. Use this as preparation to ski bumps.
2. Develop upper and lower body separation.
3. Teach the difference between medium and long radius turns.
4. Carve medium and long radius turns.
5. Link parallel turns.
6. Play with turn shapes. (Discuss why different turn shapes may be used.)
7. Teach a pole touch for those with poles, stage 1, 2, or 3 outrigger usage for those with riggers.
8. Inside leg/rigger steering.
9. Expand turn initiation possibilities.

10. Tactics in powder, ice, and/or crud.
11. Blocking pole/rigger plant.
12. Counter Rotation or Anticipation/Release.
13. Strategies for efficiently moving across flats, narrow cat tracks, and double fall line egress routes.
14. Approaches for effectively dealing with crowds, noise, and distractions
15. Terrain based activities for skill development and fun.
16. Pacing the lesson for best use of cognitive, affective, and physical strength of the student.
17. Activities to anchor learning for students with various learning preferences.
18. Providing feedback to students who are sensitive to receiving it.
19. Skill development for entry level racers.
20. Basic course tactics for slalom and giant slalom racing.

Questions

1. Assessment
 - a. Refer to the *Adaptive Alpine Technical Manual* for assessment information. Discuss all possible cognitive, affective, and physical manifestations associated with the students diagnoses.
 - b. What, if any, ambulation aids are used? Why do they use them? How will they affect skiing?
 - c. Discuss any safety, communication, behavior, and other concerns students may have.
 - d. Determine which adaptive technique/equipment students will use to ski at this time. Give rationales for the choice and consider other pieces of adaptive equipment that may be used instead. Explain any adaptations or changes over time.
2. Teaching
 - a. Discuss how the information gained during the assessment will affect goal setting, lesson planning, and teaching technique.
 - i. Instructor behavior;
 - ii. Student behavior/preferences;
 - iii. Practice;
 - iv. Pacing;
 - v. Motivation, etc.
3. Technical
 - a. Discuss how the information gathered during the assessment will affect ski technique. What steps can be taken to mitigate problems?
 - b. How will the skiing model be adapted to accommodate students?
 - c. Are the goals realistic?
 - d. Explain the rationale behind all technical decisions made.

Appendix A: Resource List

This document has been developed to provide you with some of the basic materials you need to prepare for your Adaptive Alpine Level 1 & 2 exams. However, it is by no means comprehensive and you should study and be very familiar with the following resources.

PSIA-RM-AASI Level 1 & 2 Exam Material (this document)
PSIA-RM-AASI Adaptive Common Gaits in Adaptive Students (free download)
PSIA-RM-AASI Adaptive Exam Guide for 3-track / 4-track (free download)
PSIA-RM-AASI Adaptive Exam Guide for Bi-Ski (free download)
PSIA-RM-AASI Adaptive Exam Guide for Cognitive Disabilities (free download)
PSIA-RM-AASI Adaptive Exam Guide for Mono-Ski (free download)
PSIA-RM-AASI Adaptive Exam Guide: Slider (free download)
PSIA-RM-AASI Adaptive Exam Guide for Visually Impaired (free download)
<https://www.psia-rm.org/education/adaptive-alpine/#1539010390285-10c2e42a-77d1>

PSIA-AASI Movement Matrix (Must be a PSIA member): <http://www.thesnowpros.org>

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Adaptive Alpine Technical Manual*. Lakewood, CO: The American Snowsports Education Association, Inc., 2017.

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement*, Lakewood, CO: The American Snowsports Education Association, Inc., 2019. Download www.thesnowpros.org.

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Adult Alpine Teaching Handbook*. Lakewood CO: American Snowsports Education Association Education Foundation, 2015.

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Alpine Technical Manual*. Lakewood, CO: The American Snowsports Education Association, Inc., 2015.

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Fundamental Mechanics of Alpine Skiing Across Adaptive Disciplines*. The Professional Ski Instructors of America Education Foundation. Free download:
http://www.thesnowpros.org/Portals/0/Images/Publications%2C%20Video%20%26%20Resources/PSIA_AdaptiveFundamentals_Final_web.pdf

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Teaching Snowsports Manual*. Lakewood, CO: The American Snowsports Education Association, Inc., 2018.

For lesson observation, contact a PSIA-RM Member School: <http://www.psia-rm.org/ski-ride-schools>

For PSIA-RM Education Clinics and Certification Courses: <http://www.psia-rm.org>

For Smart Style (Freestyle Terrain Safety Initiative): <http://www.nsaa.org/nsaa/safety/smart%2Dstyle/>

For Your Responsibility Code: <http://www.nsaa.org/safety-programs/responsibility-code/>

For Demonstration equivalencies (part of the PSIA Adaptive Alpine Standards Exam Supplement):
<http://www.thesnowpros.org/Portals/0/Documents/National%20Standard/PSIA%20Adaptive%20Alpine%20Exam%20Supplement%20Final%206.4.14.pdf?ver=2016-09-06-113404-923>

For functional skiing tasks/demonstrations, some videos are available online:

Basic parallel turns: <https://vimeo.com/channels/148252/16748430>

Dynamic parallel turns: <https://vimeo.com/channels/148252/16748980>

Fall-line bumps: <https://vimeo.com/channels/148252/16748715>

Falling leaf: <https://vimeo.com/16749125>

Free skiing on black terrain: <https://vimeo.com/channels/148252/16749384>

Free skiing on groomed terrain: <https://vimeo.com/channels/148252/16749636>

Hourglass turns: <https://vimeo.com/16749835>

Medium radius in bumps: <https://vimeo.com/channels/148252/16749990>

Pivot slips: <https://vimeo.com/channels/148252/16750399> & <https://www.youtube.com/watch?v=k5lt-ieahW4>

Sideslip to a stop: <https://vimeo.com/channels/148252/16750688>

Short turns: <https://vimeo.com/channels/148252/16750628>

Stem turns: <https://vimeo.com/channels/148252/16750871>

Synchronized skiing: <https://vimeo.com/16751099>

Traverse sideslip traverse: <https://vimeo.com/16751317>

Wedge Christie: <https://vimeo.com/channels/148252/16751517>

Appendix B: Study References for Adaptive Level 3 Exam Outcomes

This list of study references and resources is just a start in your preparation for your Level 3 Exam. At this level, you are expected to develop additional resources as an adaptive ski instructor.

Skiing	
Adaptive Alpine Level 3 Exam Outcomes	Study References & Resources
Adaptive functional skiing tasks *Note: videos are not available for all functional skiing tasks.	Adaptive Alpine Level 3 Prep Clinic
	School trainer or TTP trainer
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
	Demonstration videos (see Appendix A)
Milestone Demonstrations	Adaptive Rocky Mountain Trainer Camp
	School trainer or TTP trainer
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
	Demonstration videos (see Appendix A)
Teaching Components	
Adaptive Alpine Level 3 Exam Outcomes	Study References & Resources
Teaching/Learning Cycle	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Learning Styles	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Parameters for Effective Teaching	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
Teaching for Transfer	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
Lateral Learning	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Feedback	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
Pacing	PSIA-RM-AASI Alpine Level 3 Exam Materials
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
Lesson content	Adaptive Alpine Level 3 Prep Clinic
	School trainer or TTP trainer
	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
	<i>Alpine Technical Manual</i> (PSIA-AASI)
Class handling	<i>Adaptive Alpine Technical Manual</i> (PSIA-AASI)
	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials

	(this document)
	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Teaching styles	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Coaching	PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document)
	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
Technical Components	
Adaptive Alpine Level 3 Exam Outcomes	Study References & Resources
Alpine Skiing Fundamentals	<i>Alpine Technical Manual</i> (PSIA-AASI)
	<i>Fundamental Mechanics of Alpine Skiing Across Adaptive Disciplines</i> (PSIA-AASI)
Skill blending	<i>Alpine Technical Manual</i> (PSIA-AASI)
	<i>Teaching Snowsports Manual</i> (PSIA-AASI)
ATS	<i>Alpine Technical Manual</i> (PSIA-AASI)
Adaptive ski instruction	<i>Adaptive Alpine Technical Manual</i> (PSIA-AASI)
	<i>Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement</i> (PSIA-AASI)
	PSIA-RM-AASI Adaptive Exam Guide for 3-track / 4-track
	PSIA-RM-AASI Adaptive Exam Guide for Bi-Ski
	PSIA-RM-AASI Adaptive Exam Guide for Cognitive Disabilities
	PSIA-RM-AASI Adaptive Exam Guide for Mono-Ski
	PSIA-RM-AASI Adaptive Exam Guide: Slider
	PSIA-RM-AASI Adaptive Exam Guide for Visually Impaired
Adaptive equipment	PSIA-RM-AASI Common Gaits in Adaptive Students
	<i>Adaptive Alpine Technical Manual</i> (PSIA-AASI)
	Resources available through individual equipment manufacturers
	<i>Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement</i> (PSIA-AASI)
	PSIA-RM-AASI Adaptive Exam Guide for 3-track / 4-track
	PSIA-RM-AASI Adaptive Exam Guide for Bi-Ski
	PSIA-RM-AASI Adaptive Exam Guide for Cognitive Disabilities
	PSIA-RM-AASI Adaptive Exam Guide for Mono-Ski
	PSIA-RM-AASI Adaptive Exam Guide: Slider
	PSIA-RM-AASI Adaptive Exam Guide for Visually Impaired
PSIA-RM-AASI Common Gaits in Adaptive Students	
Disability understanding	<i>Adaptive Alpine Technical Manual</i> (PSIA-AASI)
	<i>Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement</i> (PSIA-AASI)
	https://nei.nih.gov/kids/about_the_eye
	https://nei.nih.gov/healthyeyes/howwesee
	https://www.nei.nih.gov/sites/default/files/nehep-

	pdfs/EyeHandout_508.pdf
Medication understanding	<i>Adaptive Alpine Technical Manual</i> (PSIA-AASI) <i>Adaptive Alpine Technical Manual, Diagnoses and Medication Classification Supplement</i> (PSIA-AASI)
<u>Movement Analysis</u>	
Adaptive Alpine Level 3 Exam Outcomes	Study References & Resources
Alpine Skiing Fundamentals	<i>Alpine Technical Manual</i> (PSIA-AASI) <i>Fundamental Mechanics of Alpine Skiing Across Adaptive Disciplines</i> (PSIA-AASI)
Skill blending	<i>Alpine Technical Manual</i> (PSIA-AASI) <i>Teaching Snowsports Manual</i> (PSIA-AASI)
Movement Analysis	<i>Alpine Technical Manual</i> (PSIA-AASI) PSIA-RM-AASI Adaptive Alpine Level 3 Exam Materials (this document) <i>Fundamental Mechanics of Alpine Skiing Across Adaptive Disciplines</i> (PSIA-AASI)
<u>Safety</u>	
Adaptive Alpine Level 3 Exam Outcomes	Study References & Resources
Your Responsibility Code	http://www.nsa.org/safety-programs/responsibility-code/
Smart Style (Freestyle Terrain Safety Initiative)	http://www.nsa.org/nsaa/safety/smart%2Dstyle/