



ROCKY MOUNTAIN DIVISION
 Professional Ski Instructors of America
 American Association of Snowboard Instructors

ADAPTIVE ALPINE LEVEL 1 & 2 STUDY GUIDE

3-TRACK, 4-TRACK & SLIDER Revision 07-22-19

Name: _____

This study guide is designed to help candidates prepare for the online and on-hill adapted alpine exams and is also a valuable learning resource for anyone who desires to increase their knowledge teaching adapted alpine skiing to guests with cognitive diagnoses and those with low or no vision.

You must take the Adaptive Alpine Level 1 & 2 online exam for 3-Track, 4-Track & Sider at least one week before the on-hill exam.

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 1 & 2 course and exam are presented in the PSIA-RM-AASI Adaptive Alpine Level 1 & 2 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 a 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.

The information in this document is provided only as a guideline. Although every effort has been made in preparing and assembling this guideline, with a goal of providing timely, complete, and accurate information, PSIA-RM-AASI makes no claims, promises, or guarantees about the timeliness, accuracy, completeness, or adequacy of the contents of this guideline, and PSIA-RM-AASI assumes no liability or responsibility and expressly disclaims liability for any errors and omissions in its contents

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 student; weather conditions; terrain; other people on the slope; your own abilities, as well as those of your student and anyone who may accompany you.

This guideline provides links to other resources as well as websites owned by or maintained on behalf of third parties. The content of any such third-party source or site is not within our control, and we cannot and will not take responsibility for the information in them, nor should any references to them be considered any endorsement by PSIA-RM-AASI.

You can fill out this form by hand or electronically. If you want to fill it in by hand, simply print this document and write in your answers. If you choose to fill this form out electronically, be sure to save the document.

All answers can be found in the following resources:

PSIA-RM-AASI
ADAPTIVE ALPINE LEVEL 1 & 2 EXAM MATERIAL
Free download <https://www.psia-rm.org/education>

PSIA-RM-AASI
ADAPTIVE ENCYCLOPEDIA
Free download

PSIA-RM-AASI
ADAPTIVE INFORMATION GUIDE: 3-TRACK, 4-TRACK, SLIDER
Free download <https://www.psia-rm.org/education>

Professional Ski Instructors of America. *Adaptive Alpine Technical Manual*, 2017, American Snowsports Education Association, Inc.

Professional Ski Instructors of America. *Alpine Technical Manual*, 2014 American Snowsports Education Association, Inc.

Professional Ski Instructors of America & American Association of Snowboard Instructors. *Core Concepts for Snowsports Instructors*. The Professional Ski Instructors of America Education Foundation, 2001.

Professional Ski Instructors of America and American Association of Snowboard Instructors. *Teaching Snowsports Manual*, 2018 American Snowsports Education Association, Inc.

Teaching Section

Matching: Match the following words with their definition. Each definition is used only once.

Source: Core Concepts, Teaching Snowsports, Adaptive Alpine Exam Material

- | | |
|---------------------------|--|
| 1. ___ Learning Style | A. Questions that provide insights to your students' level of commitment and their emotional response to the lesson |
| 2. ___ Formal Operations | B. Piaget's stage of development from age 10+ |
| 3. ___ Generative | C. In the GCT model, these are considered the most powerful needs in determining a positive guest experience |
| 4. ___ Motor Learning | D. Movements learned by practice or experience that lead to a relatively permanent gain in performance |
| 5. ___ Open | E. Discussing the basic lesson format with students so they know what to expect |
| 6. ___ Proprioception | F. A person's dominant or preferred mode of processing information |
| 7. ___ Guided Discovery | G. A sensory preference in which students have a heightened awareness of their bodies and how things "feel" |
| 8. ___ Self-Actualization | H. A teaching procedure in which a person demonstrates the correct performance of skills |
| 9. ___ Kinesthetic | I. The sense of the position and movements of the body and body parts |
| 10. ___ Musical-Rhythmic | J. Focus on a broad range of activities within an ability level so the student can experience in-depth learning before progressing |
| 11. ___ Modeling | K. Repetition of movement patterns or other activities designed to develop or refine a skill |
| 12. ___ Practice | L. One of the intelligences described by Gardner in which the learner has a propensity for sounds and rhythm and making music |
| 13. ___ Previewing | M. The highest level of needs, as postulated by Abraham Maslow |
| 14. ___ Lateral Learning | N. Questions used to initiate a discussion or gain information about a student's insights and opinions |
| 15. ___ Motivational | O. Leading the students through a range of activities and/or questions that lead them to a specific answer |

Fill-in-the-blank: Fill the blank with the appropriate terminology.

Source: Core Concepts, Teaching Snowsports, Adaptive Alpine Exam Material

1. The process of evaluating student characteristics to determine how to structure individualized, effective lessons is known as _____

2. When learning new movements, people move through three basic stages of development, which are lengthened for someone who has not yet matured. List these three stages:

3. List Maslow’s Hierarchy of needs, beginning with the most pressing needs

4. In the GCT model, _____ are the lesson planning exercises which include anything we do or say in response to an identified need.

5. When an instructor sets the students in pairs or groups, defining the roles of “doer” and “watcher”, the instructor is using the _____ teaching style.

6. List the eight basic personality categories, based on Jung’s Functioning Types:

7. _____ is Piaget’s stage of development in which a person begins to visualize and manipulate objects mentally.

8. Dealing with issues such as low blood sugar or shivering from cold fall into Maslow’s _____ needs.

9. We all pursue three basic goals. List these goals:

10. The learning domain related to thinking, analyzing and speaking is called the _____ domain.

Multiple Choice: Mark the answer that best completes the statement or question.

Source: Core Concepts, Teaching Snowsports, Adaptive Alpine Exam Material

1. In terms of sensory preferences, students who depend strongly on visual input are considered _____ learners
 - A. Visual
 - B. Auditory
 - C. Kinesthetic

2. For students who have a high level of musical-rhythmic intelligence, the best way to learn to vary turn size is to
 - A. Pair them up and have them imitate their partner's turn size
 - B. Ask them to visualize making short and long turns
 - C. Suggest that they sing a quick song in their head for short turns and a slow song for long turns
 - D. Ask them to plan the shape of the turn by spotting the trees on the side of the slope

3. Which of the following is NOT a tip for using drills, progressions or games?
 - A. Relate drills and progressions to actual situations
 - B. Avoid emphasizing precision and accuracy in executing drills to prevent the student from becoming discouraged
 - C. Use drills and games to achieve technical goals
 - D. Explain why a drill is being used and how it will be beneficial
 - E. Provide ample practice time

4. Which of the following is NOT a characteristic of kinesthetic learners?
 - A. They have a heightened awareness of their bodies and how things “feel”
 - B. Directions make sense if given step-by-step
 - C. They learn best by doing
 - D. They may need to experience the sensation associated with a type of movement to understand the concept

5. Needing to be accepted and respected and be part of a group falls into the _____ level of Maslow’s Hierarchy of Needs.
 - A. Physiological
 - B. Safety/Security
 - C. Recognition/Social/Belonging
 - D. Self-esteem
 - E. Self-actualization

6. The three types of needs included in the GCT model are
 - A. Visual, Auditory, Kinesthetic
 - B. Extroverted, Sensing, Perceiving
 - C. Interpretive, Generative, Declarative
 - D. Physiological, Biological, Metalogical
 - E. Motivational, Understanding, Movement

7. Which of the following is NOT a suggestion for dealing with your students’ fear?
 - A. Develop a list of “cue sounds” that link them to past successes
 - B. Modify the task in a way that accommodates the student’s fear
 - C. Avoid discussing the fear, since talking about it magnifies the level of fear
 - D. Introduce the task on terrain where the student is comfortable

8. According to Jung’s Functioning Types, a perceiving person
 - A. Orients to the outer world by being flexible, spontaneous and adaptive
 - B. Needs to get the global concept
 - C. Learns by attending to facts and data
 - D. Makes decisions based on values and inner harmony
 - E. Is very intuitive

9. The learning partnership consists of:
- A. Student Makeup plus Instructor Behavior
 - B. Movement Analysis plus Teaching Cycle
 - C. Image plus Communication
 - D. Problem Solving plus Guided Discovery
10. According to Gardner's theory of multiple intelligences, a person who is adept in social situations and is persuasive as a leader is exhibiting _____ intelligence:
- A. Verbal-Linguistic
 - B. Interpersonal
 - C. Intrapersonal
 - D. Spatial
 - E. Bodily-Kinesthetic

Multiple Choice: Mark the answer that best completes the statement or question.

Source: Alpine Technical Manual & Adaptive Alpine Exam Material

1. Which of the following is NOT a point of *Your Responsibility Code*?
- A. Always stay in control.
 - B. People ahead of you have the right of way.
 - C. Stop in a safe place for you and others.
 - D. Observe signs and warnings, and keep off closed trails.
 - E. None of the above. They are all part of *Your Responsibility Code*.
2. Gauging your student's ability level, expectations, goals, motivations, limitations and concerns are all part of the _____ step in the Teaching Cycle.
- A. Introduce and develop trust
 - B. Assess students and their movements
 - C. Help determine goals and plan experiences
 - D. Present and share information
 - E. Guide practice

3. When an instructor controls all action, making all decisions and telling students if they are right or wrong, that instructor is exhibiting the _____ teaching style.
 - A. Command
 - B. Task
 - C. Reciprocal
 - D. Guided discovery
 - E. Problem solving

4. Which of the following is NOT one of the points of the Park Smart/Terrain Park safety message?
 - A. Make a plan
 - B. Look before you leap
 - C. Always stay in control
 - D. Easy style it
 - E. Respect gets respect

5. The Smart Style/Terrain Park Program was designed:
 - A. For use on steep terrain
 - B. For use on beginner terrain
 - C. For use in the park and pipe
 - D. To make chairlift lines safer
 - E. For young students as an alternative to *Your Responsibility Code*

Technical Section

Matching: Match the following words with their definition. Each definition is used only once.

Source: Alpine Technical Manual

- | | |
|----------------------------|---|
| 1. ___ Carved turns | A. Maximum result or performance with minimal effort. |
| 2. ___ Angulation | B. Where the turn begins. |
| 3. ___ Efficiency | C. Used to shift your center of mass from side to side. |
| 4. ___ Initiation phase | D. Turns in which the skis travel on an edge with minimal lateral slipping or skidding. |
| 5. ___ Countered stance | E. Turns in which the skis skid on corresponding edges. |
| 6. ___ Lateral movements | F. The recoil or springing back of a decambered ski. |
| 7. ___ Rebound | G. Laterally tipping and flexing certain parts of the body more than others to form angles between body segments. |
| 8. ___ Stemming | H. Tipping of the skier toward the inside of a turn. |
| 9. ___ Eversion | I. The application of force across a surface. |
| 10. ___ Christie turns | J. One of the skills of the PSIA skills concept. |
| 11. ___ Vertical movements | K. Used to raise or lower your center of mass. |
| 12. ___ Inclination | L. Movement of a body part outward, away from the midline of the body. Typically, this is associated with foot pronation. |
| 13. ___ Rotary | M. Movement of the skis sideways. |
| 14. ___ Slipping | N. The displacement of one ski to a position convergent with the weighted ski. |
| 15. ___ Pressure | O. Involves the inside (uphill) half of the body leading the outside (downhill) half of the body through the turn. |

Fill-in-the-blank: Fill the blank with the appropriate terminology.

Source: Core Concepts, Adaptive Alpine Exam Material

- The patella is also called the _____.
- Freezing or partial freezing of a body part is called _____.
- Compared to an adult, a child's center of mass is located slightly _____ (lower/higher) in the torso.
- A joint in which a convex part of one bone fits into a concave part of another, allowing motion in only one plane is called a _____ joint. Knee and finger joints are examples of such joints.

5. In terms of physics, the _____ is the average position of the mass of an object in three dimensions: front-back, left-right and up-down. This is also known as the center of gravity.

Matching: Match the following words with their definition. Each definition is used only once.

Source: *Adaptive Alpine Manual, Adaptive Encyclopedia*

- | | |
|---------------------------------|--|
| 1. ___ Paper-clipping | A. Disorder resulting from anoxia to the brain before, during or shortly after birth. |
| 2. ___ Multiple Sclerosis | B. Medications prescribed for blood clot prevention. |
| 3. ___ Cerebral palsy | C. Hereditary disease appearing in childhood, involving steady, progressive degeneration of spinal column and cerebrum. |
| 4. ___ Epilepsy | D. Used for students who are unable to hold their legs in a wedge. |
| 5. ___ Arthrogyrosis | E. Amputation in which half of the pelvis and the associated leg are gone. |
| 6. ___ Anti-coagulant | F. Chronic inflammation of the spine. Bones will often fuse. |
| 7. ___ Parallel progression | G. Progressive disease that causes the myelin sheath around nerve cells to become scarred or to disappear so that the nerves no longer transmit the necessary signals. |
| 8. ___ Friedreich's ataxia | H. Medications that control nausea and vomiting. |
| 9. ___ Outriggers | I. Tubular frame for trunk and forearm support. |
| 10. ___ Hemipelvectomy | J. Bamboo pole held at waist or chest height. Instructor and student ski beside each other. |
| 11. ___ Single long pole assist | K. Forearm crutches with a regular or lightweight ski tip mounted at the base. |
| 12. ___ Antiemetic | L. Condition of having immovable joints. |
| 13. ___ Ankylosing Spondylitis | M. Disorder characterized by disturbed electrical rhythm of the nervous system and typically manifested by lapses of consciousness and/or seizures. |
| 14. ___ Slider | N. Clamp type device with a hook and eye assembly, which screws to the tips of the skis. |
| 15. ___ Metal tip connector | O. Occurs when the skier bends forward at the waist and relies excessively on the outriggers. |

Fill-in-the-blank: Fill the blank with the appropriate terminology.

Source: Adaptive Snowsports Instruction & Adaptive Encyclopedia & Adaptive Information Guides (3-Track/4-Track & Slider)

1. _____ is a system in which a webbing strap goes around each thigh, with a cord from each strap passing over a little pulley at the top of a slender fiberglass rod and down to a thick rubber band anchored in a swivel at the back of each boot, which also sockets the lower end of the rod.
2. The _____ gait is characteristic of quadriplegic spastic cerebral palsy. The legs are flexed and abducted at the hip joint, causing them to cross alternatively in front of each other with the knees scraping together.
3. Independent outrigger action and developing long to medium and medium to long radius turns are both objectives of the 3-Track and 4-Track level _____ progressions.
4. When in doubt on the length of the outriggers for a beginning student, go _____ (shorter/longer) rather than _____ (shorter/longer) to avoid a stooped stance.
5. An outrigger that is _____ (too short/too long) will force the student to bend at the waist, which shifts weight to the _____ and applies little or no pressure to the boot tongue.
6. When teaching three-track skiers to turn, the first turn typically should be _____ (toward/away from) the side without the ski in order to utilize the student's strengths.
7. For a four-track skier, a _____, _____ or _____ gait may indicate the inability to ski in a wedge.
8. Outriggers bouncing and skipping on the snow indicate _____ (too much/too little) claw or tail interaction with the snow.
9. Medicines used for treatment of bladder spasms are called _____.
10. An amputation at the ankle is called a _____ amputation.

Multiple Choice: Mark the answer that best completes the statement or question.

Source: Alpine Technical Manual

1. In PSIA terminology, ATS is an acronym for:
 - A. Altitude, terrain and slope
 - B. Advanced training system
 - C. American teaching system
 - D. Altitude training school
 - E. Advanced terrain skiing

2. What are the standard phases of a turn?
 - A. Initiation, shaping, finishing/transition
 - B. Front, middle, back
 - C. Primary, secondary, final
 - D. Preceding, shaping, following
 - E. Foregoing, seminal, following
3. The acronym DIRT stands for:
 - A. Duration, intensity, rate and timing
 - B. Deflection, inclination, retraction and traverse
 - C. Drill, inquiry, reply and task
 - D. Demonstration, inclination, reinforcement and task
4. Flexing and extending in a turn are:
 - A. Rotary movements
 - B. Pressure control movements
 - C. Balancing movements
 - D. Edge Control movements
 - E. Steering movements
5. Garlands are turns that emphasize:
 - A. The shaping phase of a turn
 - B. The transitional phase between turns
 - C. The initiation and finishing phases of a turn
 - D. Edge and pressure control movements

Multiple Choice: Mark the answer that best completes the statement or question.

Source: Adaptive Alpine Manual, Adaptive Encyclopedia, Adaptive Information Guides (3-Track/4-Track & Slider)

1. Which of the following adjustments can be made on a contemporary model slider?
 - A. Height
 - B. Flexion and extension
 - C. Arm position
 - D. A, B and C
 - E. A and C

2. When using heel stabilizers and tip stabilizers, what is the general rule of thumb?
 - A. You should never use heel stabilizers with a tip stabilizer.
 - B. You should not use heel stabilizers without a tip stabilizer
 - C. Heel stabilizers cannot be used by students who ski in a wedge
 - D. A and C
 - E. B and C
3. The four basic functions served by outriggers are:
 - A. Aid balance, propulsion, slowing and turning
 - B. Aid propulsion, impulsion, momentum and carving
 - C. Aid balance, inertia, matching and anticipation
 - D. Aid stopping, starting, diverging and flow
4. Cants may be used to
 - A. Correct for pronation
 - B. Correct for supination
 - C. Compensate for differences in leg lengths
 - D. A and B
 - E. A, B and C
5. If a student has an atrophied leg, which of the following topics should be questioned as part of the student assessment?
 - A. Circulation
 - B. Feeling
 - C. Ability to control movements
 - D. A and C
 - E. A, B and C
6. A guest with the following diagnosis would NOT commonly use a slider.
 - A. AK (Above the Knee amputation)
 - B. Spina Bifida
 - C. Spinal cord injury C7 complete
 - D. Osteosarcoma and other cancers

7. For three-track skiers, pronation or supination of the dominantly weighted foot may indicate:
 - A. That the student will predominantly pressure the front or back of the ski
 - B. Inability to maintain a flat ski
 - C. A bilateral amputation
 - D. Nothing. This is not a reliable indicator

8. For a three-track skier, edging during a straight run may indicate:
 - A. The boot is too long
 - B. The outriggers are too short
 - C. The need for canting
 - D. A and C
 - E. A and B

9. Speed control, turning to a stop and linked turns are all objectives of the Slider level ____ progression
 - A. One
 - B. Two
 - C. Three
 - D. Four
 - E. Five

10. Choice snow conditions and terrain for a 3-Track/4-Track Level 6 student would be:
 - A. Powder on any terrain
 - B. Soft bumps on easy blue terrain are not icy
 - C. Only groomed blue trails
 - D. A variety of snow conditions on trails that are not too steep and do not have bumps
 - E. A and B