

# AMERICAN MOUNTAIN GUIDES ASSOCIATION

## SINGLE PITCH INSTRUCTOR PROGRAM HANDBOOK

### **Participation Statement**

The American Mountain Guides Association (AMGA) recognizes that climbing and mountaineering are activities that involve the potential for serious injury or death. Those participating in these activities should be aware of these risks and assume responsibility for their own actions. That being said, professional climbing instructors can help clients manage risks, learn valuable skills and maximize their enjoyment of the sport. The AMGA provides training and assessment courses and associated literature to help instructors facilitate the best possible experiences for their clients as they enjoy climbing and mountaineering.

### **AMGA Mission Statement**

*To inspire and support a culture of American mountain craft.*

### **AMGA Code of Ethics**

1. All personal objectives and the objectives of our clients must be subordinate to the safety and care of our clients.
2. The safety of the public is our concern, and where possible and practical, we must provide assistance to those having difficulty by offering help which is appropriate under the circumstances and if it does not compromise the safety of our clients.
3. Our clients have the right to expect us to be up-to-date on the latest methods and techniques and to use appropriate and well-functioning equipment.
4. We must always be aware of our own physical, technical, and experiential limitations. We must use routes and terrain that are within our expertise and capabilities.
5. As AMGA guides, whether certified, aspirant, or student, and as instructors and Members, we are expected to teach and practice Leave No Trace principles at all times and to be knowledgeable of local natural history.
6. As professionals, we must be culturally competent. We must treat clients, the public, and our fellow guides with respect. The AMGA assumes that all human beings, regardless of race, religion, gender, sexuality, or creed, are entitled to enjoy the mountains without threat of discrimination, diminution of their values and customs, or disrespect. An AMGA professional is expected to be an ambassador of human compassion and understanding.
7. At all times, we represent the AMGA and should conduct ourselves in a manner that reflects well on the AMGA. This applies not only on AMGA courses, but anytime we are interacting with clients, the public, or others including government agencies. We must work within the framework of the AMGA Professional and Terrain Guidelines and Accreditation guidelines and contracts. This includes accurately and unambiguously representing the level of our certification to clients, government agencies, the public, and others.
8. As AMGA guides, whether certified, aspirant, or student, and as instructors and Members, we are expected to work within the permit, certification, and aspirant requirements of the country and/or land agency in or under which we intend to work. We are also required to obey all laws, rules, and regulations applicable to our guiding or other activities. AMGA Members should represent themselves fairly and adequately.

## **Introduction and how to use this Manual**

This handbook contains information for SPI candidates and AMGA licensed SPI Providers offering AMGA SPI Programs. It is intended to be used in conjunction with the SPI textbook *Rock Climbing: The AMGA Single pitch Manual, Gaines and Martin*. Operational frameworks and guidelines are provided which ensure that continuity is maintained from program to program and between instructors and examiners. Continuity provides a uniform standard for candidates who are taught, coached, and examined by a variety of instructors and examiners over a period of years. Continuity also assists in ensuring the program presents a professional image to candidates and outside observers, and it eases the workload of organizing, preparing, and operating courses.

## **Audience**

Candidates on single pitch instructor courses and assessments. This manual was written to help candidates prepare for and complete the AMGA Single Pitch Instructor course and certification assessment.

## **AMGA Members**

AMGA members may find this a helpful resource for conducting programs in the field. This manual will supplement their previous training and certification.

## **Acknowledgment**

Many people have contributed to the preparation of this Manual by attending AMGA National Conference meetings, Training Seminars and by making detailed and constructive comments. Grateful thanks are due to the AMG SPI Program Manual Committee for help in the initial production of this publication.

Published by: American Mountain Guides Association

PO Box 1739, Boulder, CO 80306, USA

Phone: (303) 271-0984

Website: [www.amga.com](http://www.amga.com)

Volume 1, 2014. Revised October 15, 2014.

AMGA Certified Single Pitch Instructor™ logo



# SPI Program Overview

## Preface

Many people are introduced to the sport of rock climbing on single pitch cliffs across the country. A vast majority of them take part in group climbing trips such as those sponsored by schools, churches, climbing gyms, scout groups or summer camp programs. Many will hire an instructor from a guide service for their first climbing adventure or take a course from a nationally recognized organization. Through the Single Pitch Instructor Program, the American Mountain Guides Association seeks to ensure that a high standard of climbing instruction, risk management and enjoyment is provided in these programs. The SPI program also seeks to foster an appreciation of and protection of the finite resources of single pitch crags. These high standards are achieved through experience, personal qualities, training and credentialing.

## Program Overview

The AMGA Single Pitch Instructor Program is designed to enable instructors to “*proficiently facilitate and instruct the sport of rock climbing in a single pitch setting*”. The program is for currently active rock climbers that have a real desire to teach rock climbing in a single pitch setting. Candidates should be passionate rock climbers who have their own equipment, regularly climb and have at least 12 months of outdoor rock climbing experience. Candidates could be current university professors that teach climbing, climbing instructors, scout leaders, summer camp professionals or climbers who wish to undergo additional training, experience and certification to gain employment as a climbing instructor in the outdoor adventure/education industry.

The SPI Course is not a “climbing” course. It is an instructor training course for active, proficient rock climbers and for current climbing instructors who wish to gain SPI certification. Single Pitch Instructor certification is the second stage of the AMGA’s Climbing Instructor Certification Program and will significantly help candidates who wish to work toward the next stage, the AMGA Rock Guide Course (RGC). The SPI course presents many instructor specific topics such as professionalism, teaching techniques, risk management, group site organization, climbing site conservation/LNT and assistance/rescue skills.

The SPI Program is a three day (27 hour) training course and separate two day (16 hour) assessment. Certification is valid for three years as long as the candidate keeps current AMGA Membership and First Aid Certification. After three years, current SPIs can re-take the SPI Assessment to renew SPI certification. Any current SPI who attains certification in any Mountain Guide Program discipline attains permanent SPI certification status provided they maintain AMGA membership and the appropriate level of emergency medical certification.

### Single Pitch Instructor Terrain:

*Single pitch instructor terrain is not of wilderness in nature, up to Grade I, that is climbed without intermediate belays. Approaches and descents to and from climbing venues present no difficulties such as route finding, scrambling, navigating, or short roping. The routes should not exceed Grade I or be more than one pitch in length.*

### Supervision Guidelines

- AMGA Single Pitch Instructors, Rock Instructors, Assistant Rock Guides, Rock Guides, and IFMGA Guides may work unsupervised in this terrain.
- Graduates of a Single Pitch Instructor Course may work under direct supervision of an AMGA Rock Instructor, AMGA Rock Guide or IFMGA Guide.
- Graduates of an AMGA SPI Course must attain AMGA SPI Certification within one year of completing the SPI Course in order to continue working in this terrain.
- Mentors for this terrain must be AMGA Rock Instructors, AMGA Rock Guides or IFMGA Guides. Tenured guides who meet the 2008 exemption are also permitted to supervise and mentor those working in this terrain.

## SPI Course Candidate Pre-Requisites

Candidates meet the pre-requisites for enrollment in an SPI course if they:

1. Have a genuine interest in rock climbing and instructing on single pitch crags.
2. Are at least 18 years old at the time of the course.
3. Have at least 12 months prior outdoor climbing experience.
4. Are active climbers with traditional lead climbing experience (leader placing pro).
5. Have traditionally led a minimum of 15 rock climbing pitches (any grade).
6. Are capable of comfortably climbing 5.8 while on a top rope.

The above pre-requisites are absolute minimums and most candidates exceed them. Without this minimum experience candidates are unlikely to be able to contribute to the course or make the best use of the training. Candidates who are unsure of their qualifications would benefit from hiring an AMGA Certified Rock Instructor, Rock Guide or Mountain Guide to evaluate and enhance their skill level prior to enrollment in an SPI program.

## SPI Assessment Candidate Pre-Requisites

Candidates may enroll in an SPI assessment immediately after successfully completing an SPI Course if they meet the other Assessment pre-requisites. However, it is highly recommended that SPI Course graduates take time (6-12 months) to practice and consolidate their skills before undertaking the assessment.

Candidates meet the SPI Assessment pre-requisites if they:

1. Have successfully completed an AMGA Single Pitch Instructor Course.
2. Have traditionally led a minimum of 40 rock climbing pitches. A large number of these should be at the 5.6 grade (or higher) in various locations and on a variety of different rock types.
3. Are capable of comfortably lead climbing (leader placing own protection) on any 5.6 traditional route. Candidates will demonstrate their leading ability on a variety of routes during the assessment.
4. Are capable of comfortably climbing 5.8 with a top belay. Candidates will demonstrate their top rope climbing ability during the assessment.

## Gaining SPI Certification

To gain SPI Certification candidates must:

1. Successfully pass the SPI Assessment.
2. Hold current AMGA Membership at Professional level.
3. Hold current First Aid Certification (see SPI Certification First Aid Requirements).

## SPI Certification First Aid Requirements

First aid training is not a pre-requisite for participation in a course or assessment. For SPI certification to be valid, however, instructors must hold appropriate medical certification for the location in which they will be working. SPI certification is not valid for instructors whose medical certification has lapsed. It is the responsibility of individual instructors to maintain appropriate medical certification.

## SPI Certification Upkeep and Recertification

Instructors must maintain AMGA membership. If instructors allow their AMGA membership to lapse, their SPI Certification is invalid until they re-establish their AMGA Membership. Single Pitch Instructors' professional responsibility includes ensuring they maintain current AMGA membership and first aid certification.

SPI Certification is valid for three years from the date of certification. There are three options for renewal:

1. Certified Single Pitch Instructors can pass the two-day SPI Assessment to renew their certification.
2. Certified Single Pitch Instructors who successfully complete any higher level AMGA course are granted SPI certification for three years from the course end date. Upon completing courses, the SPI must contact the AMGA so that their records can be updated.
3. Current Certified Single Pitch Instructors who become certified in any discipline in the AMGA Mountain Guide Program are granted permanent SPI certification.

**NOTE:** SPI certification must be current at the time of higher level certification is achieved in order for this option to be valid.

To keep SPI Certification current, SPIs should seek out recertification before the expiration date of their certification. Candidates who let their certification lapse can take part in an SPI Assessment but they will not hold any certification between their SPI expiration date and successfully passing an SPI Assessment. From a professional standpoint this is not advisable.

## SPI Program Hours and Ratios

An SPI course is:

1. A minimum of 27 hours, normally run as three consecutive nine hour days or day field sessions with evening classes.
2. Not to exceed a ratio of six students to one current SPI Program Provider.
3. Not to exceed twelve total students directed by one current SPI Program Provider and, at a minimum, one AMGA approved SPI Assistant Provider.

An SPI assessment is:

1. A minimum of 16 hours run over two consecutive days. Candidates who meet the assessment prerequisites may take the assessment directly after an SPI course though this is not recommended.
2. Not to exceed a ratio of six candidates to one current SPI Program Provider.
3. Not to exceed a total of twelve candidates under the direction of one current SPI Program Provider and one AMGA approved SPI Assistant Provider.

Because both the course and assessment address group leadership and site management issues, assessments will include the participation of outside clients during the second day.

## Required Equipment List for Participants in an SPI Course or Assessment

### Climbing equipment:

- UIAA/CE approved Climbing Helmet
- UIAA/CE approved Climbing Harness **with belay loop**
- Climbing shoes or approach shoes in which the candidate can climb up to 5.7
- Nut removal tool
- Standard “lead climbing rack” such as, stoppers/nuts, SLCD's, tri-cams, etc.
- Assorted 24” and 48” runners (must have at least one 48” runner)
- 10 *or more* non-locking carabiners
- 3 *or more* locking “HMS/Pearbiners”
- 6 *or more* locking carabiners, (the more, the better)
- Tube-type Belay/rappel device, such as the “Verso”, “ATC” or “Pyramid”, etc.
- Releasable assisted braking device, such as the Petzl “GriGri” or Trango “Cinch”
- 2 Prusik loops (1m of 6mm Nylon Accessory Cord)
- 2 cordelettes (5m of 7mm Nylon Accessory Cord)
- One 50-60m "single" dynamic rope (9.5-10.5mm) suitable for leading and top roping
- One static *or* “semi static” (gym line) rope 9-11mm, 30m+, for setting up anchors and fixed lines

***All gear will be inspected on the first morning of the course and is expected to be in good condition.  
Mark all of your gear!***

## SPI Course Overview

The following three day outline is the standard progression for an SPI course. Program Providers may present a different daily schedule but the entire curriculum will be covered in the course. Program Providers may add to the curriculum on the course at their discretion, but they will not omit items from the established SPI curriculum. SPI Program providers must make it clear when they are teaching outside the established curriculum and should not evaluate beyond that curriculum. The course is normally run over three consecutive nine hour days but as long as the curriculum is covered over 27 hours the course may be run over separate weekends or even as a semester class.

### Day 1

Session 1: SPI and AMGA Program Overview  
Session 2: Professionalism  
Session 3: Equipment  
Session 4: Knots and Hitches  
Session 5: Belaying  
Session 6: Protection and Anchoring  
Session 7: Teaching  
End-of-Day Debriefs

### Day 2

Session 8: The Climbing Site  
Session 9: Site Organization and Group Management  
Session 10: Base-Managed Sites  
Session 11: Assistance Skills: Base-Managed Sites  
Session 12: Programming and Risk Management  
End-of-Day Debriefs

### Day 3

Session 13: Instructor Demo Lead Climb  
Session 14: Top-Managed Sites  
Session 15: Lowering  
Session 16: Assistance Skills: Top-Managed Sites  
Session 17: Rappelling  
Session 18: Climbing Movement  
Session 19: Review Sessions  
Final Individual and Group Debriefs

### Day One

#### Summary:

Session 1: SPI and AMGA Program Overview  
Session 2: Professionalism  
Session 3: Equipment  
Session 4: Knots and Hitches  
Session 5: Belaying  
Session 6: Protection and Anchoring  
Session 7: Teaching  
End-of-Day Debriefs

## Introductions

This time is used to introduce the instructors and participants, delineate the course objectives, help participants get to know each other, express goals and expectations, etc.

### Session 1: SPI and AMGA Program Overview

**Goals:** The participant will be able to articulate an understanding of the SPI Program, AMGA organization, programs, certification levels, history and mission.

**Location:** Classroom setting or crag

**Equipment:** Discussion format. No equipment is required.

**Overview:** An overview of the AMGA, and an introduction to instruction,

- History, mission, programs and certification levels of the AMGA
- Recreational climbing and how it differs from professional instruction
- SPI Program overview, course and assessment and scope and boundaries of the program
- The Single Pitch Instructors terrain guidelines
- Appropriate representation of AMGA training and certification level to clients and the public and the AMGA Brand Use Policy

**Textbook Reference: viii-xiii**

### Session 2: Professionalism

**Goals:** Candidates will be able to describe the traits of a professional instructor and embody those traits as an instructor.

**Location:** Classroom or crag.

**Equipment:** Discussion format; no equipment required.

**Overview:** This session entails a discussion of what is involved in being a professional climbing instructor.

- Appearance: Clean clothes, neat, gear in good condition and organized.
- Time keeping and time management skills.
- Organization and leadership skills.
- Technical skills and climbing ability.
- Instructional skills.
- Professional demeanor, appropriate language and positive attitude.
- Additional training and certification (first aid, rescue, LNT, etc.).
- Instructor notebook and keeping instructor notes.
- Cultural Competency: A professional instructor should demonstrate willingness and ability to work effectively with participants from a wide range of backgrounds and experiences. A professional instructor should also demonstrate skillful leadership in communication and human resource management, engendering safe learning environments for all participants regardless of race, color, religion, national origin, sex, sexual orientation, gender identity, disability or age.
- **Textbook Reference: Professionalism pages 3-5**

### Session 3: Equipment

**Goals:** Participants will have comprehensive knowledge of equipment and materials used in single-pitch climbing instruction, and will be familiar with its use, care, applications, and storage.

**Location:** Classroom setting or crag

- Equipment: All types of climbing equipment that will be used in the SPI program
- Overview: A hands-on review of climbing equipment and materials
- The instructor's personal equipment: Review of required equipment list, the instructor's pack (first aid kit, communication device, etc.).
  - Rope: dynamic, semi-static and static rope and their proper applications.
  - Webbing and cordage: materials, application and care.
  - Carabiners.
  - Protection: gear appropriate for anchor building and leading in single pitch settings.
  - Program equipment: client harnesses, helmets and belay/rappel devices - types and fitting; improvised chest harness.
  - **Textbook Reference: Equipment pages 28-61, 112-143**

## Session 4: Knots and Hitches

- Goals: Candidates will demonstrate proficiency in tying and understanding of the application of the knots and hitches listed below.
- Location: Classroom setting or crag
- Equipment: Climbing ropes, cordelettes and slings.
- Overview: A hands-on review of climbing knots and hitches which should include the following:
- Figure 8 family
  - Overhand family
  - Double overhand on a bight (BHK)
  - Ring bend
  - Clove hitch
  - Girth hitch
  - Bowlines
  - Münter hitch
  - Münter mule
  - Friction hitches (autoblock, Prusik, Klemhiest)
  - Double fisherman's bend
  - Flat Overhand (Patagonia Knot)
  - **Textbook Reference: Knots and Hitches pages 62-101**

## Session 5: Belaying

- Goals: Candidates will demonstrate a thorough understanding of belay devices, techniques and communication. Candidates must also exhibit the ability to teach belaying clearly.
- Location: Classroom setting or crag
- Equipment: Various belay devices and climbing ropes
- Overview: A hands-on review of belaying which must include the following types and techniques:
- At the top of the cliff from the anchor:
    - Belaying via Munter Hitch including practice blocking with a Munter Mule hitch
    - Belaying with an assisted braking device – *Petzl GriGri, Trango Cinch*
  - At the base of the cliff from the harness belay loop:
    - Belaying with various plate devices
    - Belaying with an assisted braking device – *Petzl GriGri, Trango Cinch*
  - Belaying the leader
  - Communication
  - Ground anchors
  - **Textbook Reference: Belaying pages 192-203**

## Session 6: Protection and Anchoring

- Goals: Candidates will demonstrate a comprehensive understanding of anchoring principles and risk management strategies for single pitch crags.
- Location: Single-pitch climbing site with plenty of anchoring possibilities, either at the base or at the top of the cliff



Equipment: Instructor's rack

Overview: A review of anchoring principles and practice with instruction at a single-pitch crag. Candidates will demonstrate proficiency at building anchor systems that are efficient in use of both gear and time. As stated in the prerequisites, an SPI course is not an anchor class, and candidates should already be well-versed in anchor building skills and gear placement.

- Rock and natural anchor component evaluation
- Artificial gear: SLCD, stopper, hex and tri cam placement and evaluation
- Bolt and piton evaluation
- Creating a master point in an anchor
- Optimal anchor location relative to the anticipated direction of load
- Anchors for top-managed sites (creating extensions)
- Anchors for base-managed sites
- **Textbook Reference: Protection and Anchoring pages 102-181**

## Session 7: Teaching Skills

Goals: Candidates will demonstrate an understanding of different learning styles and proficiency in both instructing in a group setting and coaching on an individual basis.

Location: Classroom or at the crag.

Equipment: Teaching tools/aids.

Overview: This session will address lesson planning, basic learning styles and teaching methods for various climbing and movement topics.

- Overview of the three main ways people prefer to learn:
  - *Visual* – student who learn best by watching the skill or activity
  - *Auditory* – students who learn best by hearing or reflecting on the skill or activity
  - *Kinesthetic* – students who learn best by participating/doing the skill or activity
- Lesson planning
- The use of visual aids: video, PowerPoint presentations, text, photo or diagram handouts, white boards, objects/examples to hand out and examine.
- Effective communication skills and body language
- Program and lesson sequencing; creating a logical order
- **Textbook Reference: Teaching pages 17-27**

## End of Day Debrief

### Day Two

## Summary:

Session 8: Selecting the Climbing Site

Session 9: Site Organization and Group Management

Session 10: Base-Managed Sites

Session 11: Assistance Skills: Base-Managed Sites

Session 12: Programming and Risk Management

End-of-Day Debriefs

## Session 8: Selecting the Climbing Site

Goals: Candidates will be able to research climbing areas and interpret guidebooks, topos and climbing web sites in order to select appropriate sites for institutional climbing. Candidates will be familiar with the various land management structures in the US and their varying permitting requirements.

Location: Single-pitch site

Equipment: Guide books, topos, web print-outs for the area used

Overview: A discussion of the single-pitch crag environment as it relates to commercial use, including an overview of land management and permitting systems (USFS, NPS, BLM, state parks, private

owners, etc.), and criteria for selecting the best climbing area and routes for specifically-skilled clients.

- Land managers and commercial use permit systems
- Local and national climbing and commercial use ethics and etiquette
- Site selection and considerations for commercial and group users
- Selecting appropriate climbs for clients (physical ability, clients' goals, etc.)
- Reading route topos and interpreting route descriptions
- Understanding climbing ratings, grades and terrain classifications
  - Yosemite Decimal System (5.0-5.15, including letter grades)
  - Terrain classification (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> class terrain)
  - Commitment grade (I-VI) (III-VI not required for single-pitch climbing, but good additional knowledge)
- **Textbook Reference: The Climbing Site. Pages 7-8, 187-192**

## Session 9: Site Organization and Group Management

**Goals:** Candidates will demonstrate proficiency in site organization and group management in both top and bottom managed situations. Candidates will demonstrate an understanding of both the environmental and social issues involved in commercial guiding in single pitch settings.

**Location:** Single-pitch crag

**Equipment:** Discussion format. No equipment needed.

**Overview:** This session will look in detail at group management considerations and the organization of a single-pitch climbing site.

- Group orientations
  - Goals for the day
  - Client roles, behavior expectations and boundaries
  - Explanation of hazards and risks
  - Fitting and checking equipment (harnesses, helmets, shoes, etc.)
- Equipment organization – individual and group
- Leave No Trace practices and impact reduction strategies for groups
- Group staging area out of the way of other users
- Maximizing client participation; climber, belayer, backup belayer
- Crag etiquette – minimizing conflict with other users
  - Minimum number of set-ups to accomplish group goals
  - Avoid blocking initial pitches of a multi-pitch climbs
  - Avoid use of popular, high-traffic routes
  - Noise control
- **Textbook Reference: Site Organization and Group Management pages 4-5, 183-186**

## Session 10: Base-Managed Sites

**Goals:** Candidates will demonstrate an understanding of the rationale for working at the bottom of single pitch crags and proficiency in the skills required to operate in this setting

**Location:** Base of a single-pitch crag

**Equipment:** Ropes, anchoring equipment

**Overview:** Considerations in opting to manage from the base and techniques and strategies for executing these systems

- Rationale for choosing base-managed sites:
  - Easy to see and coach climbers and supervise belayers
  - Easier to communicate with and manage large groups at the base
  - Higher client-to-instructor ratios (i.e. 6:1) are possible
  - Faster “change-overs” so more climbing is accomplished
- Concerns for Base-Managed Sites:
  - Possibility of any object falling from above, striking belayer or clients
  - More rope in the system compared to a top belay system (more rope elongation)
  - Climbs over half the rope length require tying two ropes together to belay from the bottom

- Cannot monitor the anchor systems as well
- Base-Site Management
  - Keeping things neat
  - Rope organization
  - Closing the system - Always
- Ground Anchors
  - When to use
  - ABC, (Anchor-Belayer-Climber), always inline
  - Using natural features for ground anchors
  - No features available – using other clients as ground anchors
- Back-up belayers
- Use of ‘catastrophe knots’
- **Textbook Reference: Base-Managed Sites 190-192**

## Session 11: Assistance Skills – Base-Managed Sites

**Goals:** Candidates will be able to perform a variety of assistance skills that may be required when working at the base of a single pitch crag

**Location:** Single-pitch crag

**Equipment:** Top rope set-up

**Overview:** A detailed look at and practice of weighted and un-weighted belay take-overs, climber pick-offs and counter-balance assists.

- Belay take-overs:
  - Weighted
  - Un-weighted
- Counter ascension to assist stuck climber
- Counter-balance lower with stuck climber
- **Textbook References: Assistance Skills: Base-Managed Sites pages 221-226**

## Session 12: Programming and Risk Management

**Goals:** Candidates will demonstrate an understanding of programming and risk management issues involved in single pitch instruction

**Location:** Classroom or crag.

**Equipment:** Discussion format. No equipment needed.

**Overview:** A look at client orientations, comfort and security, instructor responsibilities, legal considerations and liability insurance. This session will also cover equipment storage and record keeping as well as program objectives and boundaries.

- Overview of the four main types of risks that could be encountered in a climbing environment, and how to reduce and manage those risks:
  - *Psychological* – fear of falling, fear of heights
  - *Sociological* – peer pressure, fear of ridicule from other clients
  - *Financial* – poor course, waste of money, lost/broken personal equipment
  - *Physical* – client injuries, fatalities
- Client orientations, security and comfort
- Equipment inspection, record keeping and storage
- Legal issues in commercial instruction, waivers, informed risk, medical screening of clients
- Identifying program goals and boundaries
- Creating an *Emergency Response Plan*
- Daily and weekly instructor meetings
- **Textbook Reference: Programming and Risk Management pages 7-16**

## End-of-Day Debriefs

### Day Three

#### Summary:

Session 13: Instructor Demo Lead Climb  
Session 14: Top-Managed Sites  
Session 15: Lowering  
Session 16: Assistance Skills: Top-Managed Sites  
Session 17: Rappelling  
Session 18: Climbing Movement  
Session 19: Review Sessions  
Final Individual and Group Debriefs

#### Session 13: Instructor Demo Lead Climb

**Goals:** Course instructor completion of a single-pitch trad lead climb demonstrating sound leading practices and considerations for student belaying of lead climbs. (Note: while the SPI is *not* a lead climbing course and the demo should only focus on lead climbing considerations for an instructor, it is acceptable to have students lead climbs if time permits and risk management considerations are addressed).

**Location:** Single-pitch crag

**Equipment:** Ropes, lead rack, etc.

**Overview:** The SPI course instructor (not candidate) will demonstrate a lead climb that focuses on considerations for students belaying leading instructors. This is a short lead that will be a catalyst for the following points of discussion:

- Selection of an appropriate climb to lead in order to set-up anchors
- Considerations for belayer position use of a ground anchor
- Teaching of lead belay technique
- Appropriate belay device for lead belaying
- Use of back up belayer
- Modeling of sound leading practices (plenty of solid protection, no soloing)
- Closing the climbing system
- Belayer/climber communication

- **Textbook Reference: Instructor Demo Lead Climb pages 234-239**

#### Session 14: Top-Managed Sites

**Goals:** Candidates will comprehend the rationale for choosing to operate from the tops of crags and display proficiency in the skills needed to execute these systems

**Location:** Top of a single-pitch crag

**Equipment:** Ropes, anchoring equipment, etc.

**Overview:** A detailed look at working from the top in single-pitch settings and the reasons for choosing this system as opposed to working from the base.

- **Reasons for Top-Managed Sites:**
  - No chance of falling objects striking belayers from above
  - 50% less rope in the system, less elongation
  - Some climbers prefer climbing toward instructors rather than away from them
  - Climbs over half the rope length are most easily belayed from the top
  - Difficult or dangerous access to the base of the cliff (sea cliff, steep ground, etc.)
  - Ability to monitor the anchor system
- **Concerns for Top-Managed Sites:**
  - Difficult (or sometimes impossible) to see climber from above on many crags
  - The climber's rope will always go over the edge when belaying from above

- Possible impact on fragile cliff top ecosystem
  - Cliff edge dangerous to manage
- Instructor and client risk management at the top of the crag
  - Tying directly in to the master point (with a clove hitch)
  - Instructor tether lines
  - Possible use of fixed lines for movement of clients in exposed areas
- Belaying from the anchor master point
  - With an assisted breaking device (GriGri/Cinch:) when, why, considerations
  - With a Munter hitch: when, why, considerations
- Station Management
  - Keeping things neat, thinking ahead to avoid organizational and systemic issues
  - Maintenance of “work space” between cliff edge and master point
  - Rope organization, stacking
- Incorporating a student belayer: clove hitch the student belayer to master point, belay as instructor from master point with GriGri/Cinch, Munter hitch
- **Textbook Reference: Top-Managed Sites pages 201-203**

## Session 15: Lowering

- Goals: Candidates will demonstrate proficiency at lowering clients and the use of appropriate back-ups.
- Location: Single-pitch crag
- Equipment: Top belay set-up
- Overview: A detailed look at lowering considerations, techniques, back-ups and reasons for lowering clients.
- Reasons and considerations for lowering clients
  - Lowering methods
    - Assisted Breaking Device with re-direct
    - Munter hitch
  - Friction hitch back-ups
  - Closing the climbing system
  - Visual contact with the client
  - **Textbook Reference: Lowering pages 204-207**

## Session 16: Assistance Skills: Top-Managed Sites

- Goals: Candidates must possess the skills to assist climbers from the top of a crag in a single-pitch setting.
- Location: Single-pitch crag
- Equipment: Top belay set-up
- Overview: This session will look at raising and assistance techniques from the top of the crag. In the single-pitch setting, there is no need for in-depth raising systems training since all problems have a “gravity feed” solution. In the rare instance when an instructor is working at a sea cliff environment or single-pitch crag where the access to the base is problematic, a prudent Instructor would belay with an assisted braking device to affect a simple raise if required.
- 3:1 raise with Assisted Braking Device
  - 3:1 assisted raise with Assisted Braking Device
  - **Textbook Reference: Assistance Skills: Top-Managed Sites pages 227-230**

## Session 17: Rappelling

- Goals: Candidates will be able to set up and manage institutional rappels, employ appropriate back-ups and execute assistance/rescue techniques
- Location: Single-pitch crag
- Equipment: Top rope set-up

Overview: This session addresses rappelling methods, considerations and back-ups used in student rappels

- Reasons and considerations for rappelling:
  - Student experience, skill instruction, crag access/egress
- Rappel set-ups:
  - High master points, set back from the edge
  - Releasable rappels
  - Single and double line rappels
- Rappel back-ups:
  - Fireman's belay (discussed, not taught at SPI level.)
  - Independent belay
- Problem avoidance:
  - Tying back long hair, loose clothing/jewelry
  - Coaching
  - Starting novice rappellers on low-angle terrain, moving to steeper/vertical terrain later
  - Visual contact with the client
- Rappel assistance:
  - Practice releasable rappel load transfers for rappellers with something stuck in their rappel devices
- **Textbook Reference: Rappelling pages 208-220**

## Session 18: Climbing Movement

Goals: Candidates will understand the principles of climbing movement and be proficient in teaching climbing movement skills in a group setting and coaching individual clients.

Location: Base of crag, boulders or artificial wall

Equipment: Top rope set-up

Overview: This session addresses teaching climbing movement skills on single-pitch crags and facilitating well managed and effective bouldering sessions for novice climbers.

- Basics of vertical movement and balance
- Common climbing skills
  - Hand holds and how to utilize them: edges, slopers, buckets, pockets
  - Foot positioning: smears, edging
  - Techniques: laybacks, stemming, chimneying, crack climbing, mantling
- Movement exercises: balance, body position, etc.
- Movement and Climbing games
- Coaching skills
- Facilitating Bouldering
  - Risk Management (programmatic/insurance issues of "un-rope" climbing)
  - Correct use of bouldering pads, spotters
- **Textbook Reference: Climbing Movement pages 26-27**

## Session 19: Review Session

Goals: Provide an opportunity for candidates to review all course material and voice questions related to the SPI Assessment.

Location: Single-pitch crag

Equipment: Top rope set-up

Overview: Review time

## End of Course Group and Individual Debriefs

Goals: Course instructors and candidates will complete a debrief of the course and individual participants. Instructors will review candidates' performance and identify areas for future

development in preparation of completing an SPI assessment. Participants will offer suggestions for improvement of presentation of courses

Location: Single-pitch crag or classroom.

## SPI Assessment Overview

SPI Assessments are two days in length (minimum of 16 hours assessment time) and take place at a single-pitch climbing area where there is a selection of traditional lead routes of at least 5.6 difficulty and top rope routes of at least 5.8 difficulty. SPI assessments examine all aspects of institutional single-pitch climbing. Day one examines candidates' climbing movement skills and proficiency with technical systems including anchoring and assistance skills. On day two, the examiners may arrange for the participation of volunteer novice clients (non-paying) in order for the candidates to be able to instruct in a group setting. This is not required, but is a great benefit to the assessment process as the examiner can see candidates interact with real novice climbers and the examinees do not have to 'pretend' to teach novice climbers who are actually other examinees on the assessment.

SPI examiners are responsible for creating a stress free environment that brings out the best in candidates. Candidates must demonstrate that their technical and instructional skills meet the standards of AMGA Single Pitch Instructor certification. The SPI Assessment is organized into four distinct evaluation sessions: *climbing movement, technical skills, teaching ability* and *group management skills*. Candidates are evaluated by the AMGA marking system categories as explained below

### Assessment Categories

- ***Risk Management***
- ***Client Care***
- ***Technical Systems***
- ***Application***
- ***Terrain Assessment***
- ***Movement Skills***
- ***Mountain Sense***
- ***Professionalism***
- ***Instructional Technique***

AMGA SPI candidates are evaluated on the same nine categories that are used in all other AMGA guide program assessments. This maintains uniformity throughout the AMGA programs. All of these assessment categories are applicable to single pitch instruction and their use in the climbing instructor program is intended to establish a consistent evaluation protocol for those who pursue higher level certification. The categories are explained in detail below.

### ***Risk Management -***

- **Client Security** - The candidate must maintain an adequate level of security for the client(s) given the objective, conditions and the client profile.
- **Hazard Recognition/Analysis** - The candidate must recognize and analyze hazards that will affect risk, such as objective hazards, general, internal, external hazards, etc.
- **Minimization of Risk** - The candidate must minimize risk by use of all reasonable, appropriate measures.
- **Instructor Security** - The candidate must maintain an adequate level of security for the instructor, given the objective and conditions.

### ***Client Care -***

- Comfort - The candidate must be aware of clients' comfort levels and ensure not to compromise risk management.
- Communication - The candidate must clearly and professionally communicate instructions for a comfortable and enjoyable client experience.
- Client Orientation - The candidate must provide adequate information to the client.
- Quality of Experience - The candidate must provide a rewarding and enjoyable experience within the confines of conditions, risk management, client profile and assessment assignment.

### ***Technical Systems -*** The candidate must understand and correctly use:

- Protection/Anchors/Belays - protection, anchor, and belay techniques
- Rappelling/Lowering - rappelling and lowering techniques
- Rope Management - appropriate rope management techniques for both top- and bottom-managed sites
- Assistance Skills – assistance and 'rescue' systems

### ***Application -*** The candidate must:

- "Apply the right technique in the right place at the right time."

### ***Terrain Assessment -***

- Route Selection – selects appropriate routes for teaching novice climbers.
- Route finding - appropriately approach, ascend, and descend routes.

### ***Movement Skills -***

- The candidate must demonstrate smooth, confident, and efficient movement while protecting, anchoring, belaying.
- The candidate must demonstrate capability of leading 5.6 traditional routes and top roping 5.8.
- Fitness & stamina – The candidate must be in adequate physical shape to complete the day's objective and maintain a reasonable margin of additional energy.
- Pace & time management – The candidate must show efficient use of time and good pace, given the day's objectives, conditions and client profile.

### ***Mountain Sense -***

- Decision Making - The candidate must effectively identify, act upon, and carry out options.
- Stress Management - The candidate must manage stress without unduly compromising performance.
- Error Correction - The candidate must correct errors in due time, without compromising risk management or the objective and with minimum disruption of activity.

### ***Professionalism -***

- Personal Presentation – The candidate must have a well-presented, professional appearance
- Attitude/Demeanor- The candidate should be professional at all times.
- Planning/Preparation - The candidate must plan and prepare adequately for all activities, including research, knowledge of options, and familiarity with alternatives.
- Environmental Consciousness - The candidate must exhibit current environmentally-sensitive back country travel and climbing practices.

### ***Instructional Technique -***

- Lesson Planning - The candidate must use and implement appropriate lesson plans and teaching progressions.
- Pedagogy - The candidate must understand and use a variety of teaching methods adaptable to learner types, and communicate clearly with a positive attitude.
- Coaching and Tips - The candidate must provide appropriate coaching and tips to assist in creating a comfortable and rewarding experience for the client(s).



# Day One

## Session 1: SPI Assessment Orientation

|            |  |
|------------|--|
| Goals:     | Introduction of candidates and examiners, detailing candidates' climbing and instructing experience since completion of an SPI Course, expectations and the assessment process |
| Location:  | Single-pitch crag or classroom   |
| Equipment: | Classroom setting-none required  |
| Overview:  | Introductions detailing the training and experience of the candidates, examiners plan for the course, expectations, the marking system and criteria for evaluation.            |

## Session 2: Lead Climbing and Top Rope Session

|            |   |
|------------|---|
| Goals:     | Candidates will demonstrate their climbing movement skills by comfortably top roping 5.8 and leading 5.6 traditional climbs   |
| Location:  | Single-pitch crag   |
| Equipment: | Top roping and traditional leading equipment  |
| Overview:  | Two-four hours of relaxed climbing time where candidates will top rope various single-pitch climbs up to a 5.8 grade and trad lead climb to a 5.6 grade. Examiners will observe candidates interact with other climbers, select appropriate climbs, build anchors and belay from the top and base of the crag. Examiners will assess candidates' climbing ability, anchors building, rope work, station management, communication and general climbing proficiency in a single-pitch setting. |

## Session 3: Technical Components

|            |   |
|------------|---|
| Goals:     | Candidates will demonstrate proficiency in executing technical systems used in single pitch climbing.   |
| Location:  | Single-pitch crag   |
| Equipment: | Top roping and traditional leading equipment  |
| Overview:  | Candidates should display competence in the following technical skills; <ul style="list-style-type: none"><li>• Base-managed Site:<ul style="list-style-type: none"><li>▪ Rappelling over an edge to the base of a crag</li><li>▪ Weighted and un-weighted take-over of belays</li><li>▪ Counter-ascend to a stuck climber</li><li>▪ Counter-balanced lower with a climber</li></ul></li><li>• Top-Managed Site:<ul style="list-style-type: none"><li>▪ 3:1 Raise using Assisted Braking Device</li><li>▪ 3:1 Assisted raise using Assisted Braking Device</li><li>▪ Releasable rappel set-up, fixing problems on rappel such as stuck rappel device</li><li>▪ Lowering clients</li></ul></li></ul> |

## End-of-Day Debriefs

### Day Two

#### Session 4: Group Management

- Goals: Candidates will demonstrate their group management skills
- Location: Single-pitch crag
- Equipment: Top roping equipment
- Overview: Candidates will fulfill various roles in facilitating a day of single pitch climbing for a group of volunteer clients. Examiners will evaluate candidates on their performance in the following tasks:
- Morning client orientations, briefings
  - Paperwork, waivers
  - Equipment selection, fitting, explanations
  - Client security, comfort and communication
  - Group management
  - Overseeing multiple climbers in a base-managed site
  - Running a rappel site

#### Session 5: Teaching Components

- Goals: Candidates will demonstrate their instructional and coaching skills.
- Location: Single pitch crag
- Equipment: Candidate's choice
- Overview: Candidates will present a variety of lessons on climbing topics. The lessons will be assigned either via email before the assessment or on the morning of day one of the assessment. Candidates will prepare a lesson plan and present a hard copy of the lesson for review by the examiner.
- Possible teaching topics include:
- Interpreting guide books, topos and climbing grades
  - Belaying
  - Equipment types, care and storage
  - Helmets and harness: types, selection and fitting
  - Rope dynamics and care
  - Knots and friction hitches
  - Rappelling
  - Climbing movement
  - Leave No trace
  - Bouldering
  - Communication in climbing

## End-of-Assessment Group and Individual Debriefs

### Assessment Scoring

Candidates' skills will be evaluated and graded on both days of the Assessment. An assessment is based on the ability of candidates to provide a well-managed and rewarding experience for their clients. Failing to pass an assessment is typically an issue of risk management. Candidates are graded on their performance in 9 designated skill areas. These skills are divided into sub-categories that better define those main skill areas. A

summary scorecard will be generated from daily scores to determine whether to pass or fail a candidate. Personal interviews are held at the end of the exam where a verbal assessment will be given by the examiner(s). This is meant to help the candidates assess their own performance. In most cases, candidates are informed at this time whether they passed or did not pass the assessment.

To pass the assessment, a candidate's final summary score sheet must show no more than 3 marginal scores.

### **Marking Scale**

The marking scale used is P="Pass", M="Marginal", and NP="Not Pass".

The marks will be based on the following criteria:

**P = Acceptable performance** - The candidate shows consistently strong performance in all instructional techniques and skills. A high and consistent level of good judgment with respect to risk management and objectives is shown. The candidate is comfortable in a leadership role and has sufficient energy to meet the needs of the clients.

**M = Marginal performance** - The candidate displays weakness in important techniques, knowledge, or experience. Poor or inconsistent application of instructing techniques or principles is apparent. Multiple attempts and/or excessive time are required to attain acceptable performance. The candidate is preoccupied with her/his own needs and has limited energy for the clients.

**NP = Substandard performance** - The candidate makes a major error (or is stopped in the process of making a major error) that has potentially life-threatening ramifications, seriously compromises objectives, or chronically makes mistakes of a lesser magnitude and/or has little energy for client needs.

### **Interpretation of Marks**

One (1) **No Pass** is equal to two (2) **Marginals**.

Earning the following scores over the two days will result in failure of the SPI Assessment:

- 4 or more **Marginal** scores
- 3 **Marginal** scores in the same category

Remember, since a **No Pass** score is equal to two **Marginal** scores, an evaluation of a **No Pass** score in one category on day one, followed by a **Marginal** score in the same category the following day, would be criteria for failure of the SPI assessment.