# **Student Manual**

NORTHEAST MOUNTAINEERING, LLC.

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At Northeast Mountaineering, LLC. our mission is to share educational, inspirational & entertaining mountain experiences in New Hampshire and Beyond. We specialize in guided mountain adventures for beginners and novices at the entry level. Our programs and operational procedures are built on education, mentoring and investing time and energy in the development of our clients. While we focus on introducing and teach our clients to safely navigate the vertical world we maintain a level of competency to guide any objective world-wide.



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## **Mountain Mentor Program**

## Who is this program for?

The mentorship program is for individuals (and partners) who are financially and time committed to improving their recreational competency in mountaineering, rock, ice climbing and/or skiing. If you are looking for the freedom to control the pace of learning, difficulty of the guided climbing experience, motivated to push your ability, and have a growing passion for climbing, then this program is for you!

### What?

A comprehensive program that covers the essential skills for safe and competent climbing and decision-making. Through baseline testing we are able to establish a customized program to meet your ability level, hone your strengths, improve your weaknesses and plan for future, test-piece objectives. All participants are urged to enroll in a Wilderness First Responder (WFR) course to complete their mentorship.

## When?

The mentorship is a serious commitment. A minimum of 30 days - split classroom, online courses and field sessions - are required to cover the entire curriculum. In addition, we aim for 3 test-piece, big mountain, objectives that are student driven and guide supervised. These climbs are strategically scheduled to help drive the curriculum and keep the program focused. To cover the complete curriculum across multiple focus areas (Alpine, Rock, Ice, Skiing, Avalanche Education), the program spans at least one calendar year or four seasons.

## Why?

The goal is to become a self-sufficient climber with an advanced level of competency and decision-making. Our professional guides work hand-in-hand with you to hone your craft and help you grow while meeting the highest industry standards.

## **Mountain Mentor Program Overview**

In order to maximize the results of your mentorship, you need to be in excellent physical shape. This process begins now. Get out and climb and hike at least a few times per week. During the development of your customized plan we will address your fitness level and establish a training plan if needed.

## Baseline Testing [1 Day]

We spend one day running through the basic rope skills and climbing some pitches to establish a baseline for the curriculum. If you show competency on certain skills then we omit them from the customized plan. Your current skill set establishes the foundation for us to build on.

## **Risk Management** [8 Hour eLearning Course]

Understanding and managing risk is vital to your safety. We take a full day addressing these issues to improve your decision-making ability in the field.

## Trip Planning & Leadership [1 day]

A solid trip plan, emergency action plan and your collective preparation as a team is vital to the outcome of your adventures. We explore traditional and modern tools for establishing solids plans.

## Rope Skills & Single Pitch Climbing [5 Days]

Understanding knots, rope systems and managing a single pitch environment are essential basic skills. These sessions will provide a solid base to build from as we move onto multi-pitch and alpine objectives.

## Alpine Skills [5 Days + 1]

The alpine program will help you fine-tune your skills in alpine snow, mixed, and glaciated terrain including crevasse rescue skills.

## Rock Skills [5 Days + 1]

The rock program will help you fine-tune or learn advanced skills for rock climbing including self and partner rescue techniques.

## Ice Skills [5 Days + 1]

The ice program will help you fine-tune or learn advanced skills for ice climbing. We will discuss the differences between rock and ice climbing and how that influences our decision-making and climbing practices.

### Ski Skills [2 Days]

The ski program is designed for ski tours or ski ascents/descents, on alpine touring, split board or free-heel equipment. Topics covered include: techniques for effective and efficient uphill and downhill travel and transitions. Advanced topics will be discussed if time permits.

## AIARE 1 Avalanche Education [3 Days]

The AIARE 1 is a three-day / 24-hour introduction to avalanche hazard management. Students can expect to develop a good grounding in how to prepare for and carry out a backcountry trip, to understand basic decision making while in the field, and to learn rescue techniques required to find and dig up a buried person (if an avalanche occurs and someone in the party is caught).

## **Learning Outcomes**

- Improve competency in multiple focus areas and climbing disciplines
- Educate through a comprehensive, customized, hands-on curriculum
- Inspire recreational climbers to embark on a lifetime of safe and responsible climbing

## **Specifically the Mountain Mentor Program Addresses:**

- Decision-making and risk management
- Trip planning and Emergency Response Plan
- Single pitch climbing techniques
- Rope skills and techniques
- Basic and advanced techniques for multi-pitch rock climbing
- Basic and advanced techniques for multi-pitch ice climbing
- Basic and advanced techniques for alpine climbing and mountaineering
- Basic techniques for ski mountaineering
- AIARE Avalanche 1 curriculum
- Real world experience in the big mountain environment

## **Important Message**

Northeast Mountaineering, LLC. is a full-service mountain guide outfitter based in the White Mountains of New Hampshire. Our mission is to share inspirational, educational and entertaining mountain experiences in NH and beyond. Our programs and operational procedures are built on education, mentoring and investing time and energy in the development of our clients. While we focus on introducing and teach our clients to safely navigate the vertical world we maintain a level of competency to guide any objective world-wide.

Importantly, in choosing to voluntarily engage in the Mountain Mentor Program that operates in the backcountry and/or wilderness setting, individuals must understand that they accept and assume the inherent risks of these activities.

#### A Special Note

Most of the understanding and techniques addressed during this program require extensive practice before you can expect to be proficient. No program, this one included, can provide all that experience.

To establish and maintain proficiency in the knowledge and techniques covered in this program, you will have to practice extensively and regularly on your own during and after leaving the program. Additionally, climbing skills and techniques continue to evolve as new research becomes available. To remain current, you will need to seek out opportunities for continued education.

No program can fully guarantee your safety, either during the program or after you leave. During the program, the instructors will manage risk and involve you in discussions about what is appropriate and what is not. They will inform you of any unusual or exceptional hazards or risks involved in carrying out lessons and exercises. Whether you will be "safer" after the course or not depends entirely on how you apply your new skills and knowledge when in the mountains.

#### **Additional Resources**

The Mountain Guide Manual Freedom of the Hills

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## ABOUT NORTHEAST MOUNTAINEERING, LLC.

It is our mission to share educational, inspirational & entertaining mountain experiences in New Hampshire and beyond. We specialize in guided mountain adventures for beginners and novices of all ages at the entry level. Our programs are built on education, mentoring and investing time and energy in the development of each climber. While we focus on introducing and teaching our guests to safely navigate the vertical world we maintain a level of competency to guide any objective world-wide. #NEMGuides

### A COMPLETE EXPERIENCE

Rental Gear: Preparation is the key to success, especially in the White Mountains of New Hampshire. When you need to rent the proper gear, we've got you covered. Visit our affiliate, mtnGEAR (climbingrentals.com) to satisfy your rental needs. With our Gear Logic tips and online Gear Selection Guide you won't be left uninformed.

Lodging: We welcome you to stay with us at The Bunkhouse (bunkhouse.nemountaineering.com), our hostel-style accommodations for \$30 per night! Here you can kick back and relax after your long day outdoors! The Bunkhouse is an open-concept community bunk room where you can tell the tales of your epic adventure with other outdoor enthusiasts, relax by the stove and, of course, stay the night with minimal cash.

Photography: At Northeast Mountaineering, we understand the importance of a memory and the value of a killer profile picture. Working with the talented, professional photographers of Beyond Basecamp, our ambassador program, we capture your experience so that you can bring a piece of history home with you!

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Program Notes:		

## **Baseline Testing**

The baseline below tests the minimum standards need to progress through the mentorship curriculum. Students should show a high level of competency in every skill. **Areas of weakness need to be directly addressed in the custom, Personalized Mentor Plan (PMP).** Mentors should establish a baseline at the beginning of each focus area to help develop an effective and efficient plan moving forward.

Mentors should be using the Student Progress Organizer (SPO) to document areas of strength and weakness. This is the basis for the customized plan.

## Skills Curriculum and Practical Session

- Knots
- Anchors (natural, gear)
- Gear placements
- Belaying with a GriGri and ATC
- Lead Belaying with GriGri and ATC
- Rappelling with ATC and Munter
- Lowering with ATC, Munter and GriGri
- 3:1 Haul
- Vector Pull
- Drop Loop Haul
- Leading 5.6
- Station Management
- Instructor Rappel (lower down the tether to master point)
- Guide belayed releasable rappel (belay while they rappel)
- Weighted and Unweighted Belay Takeover
- Pick off

## Single Pitch and Rope Skills

This focus area allows students to firmly grasp the concepts needed to effectively and efficiently establish and manage a single-pitch climbing station. Areas of weakness during the baseline testing must be addressed in this focus area before moving on to the next one.

### **Classroom Curriculum**

- Leave No Trace principles: Discuss and review the 7 principles of LNT
- Rope: Discuss and show varieties of rope
  - Dynamic
  - o Static
  - Dynema
  - Nylon
- Rope care: Discussion
  - Rope storage
  - Rope cleaning
  - Coiling a rope
  - Damage checkup
- Carabiners, Cams, Nuts, Other Equipment: Discuss the characteristics and uses
- Knots:
  - o Figure Eight Family: figure eight, on a bight, retracer or follow-through
  - Fisherman's: Single, double, triple
  - Overhand
  - o Bowline
  - o Big Honkin Knot (BHK)
  - Butterfly
- · Hitches: Must be around something to maintain integrity
  - Clove
  - Girth
  - Munter
  - o Munter-Mule
- Friction Knots and Hitches: Note two ropes need to have significant difference in diameter
  - o Prussik
  - Kleimheist: note only hitch to use if your using webbing
  - Autoblock
- Knots for tying two ropes together
  - o Double Fisherman's
  - Flat Overhand
- Anchors: Discuss and demonstrate how to build a variety of anchors.
  - o Equalized
    - **A**ngle
    - Redundant
    - Nο
    - Extensions
    - Strona
    - Timely
- Tying into a rope: Explain and demonstrate proper technique for tying into a rope

- Difficulty: Discuss the standard systems of each discipline (Yosemite Decimal System, WI, NEI, etc.)
  - o Likelihood and consequence

## Skills Curriculum and Practical Session

- Anchors: practice building a variety of anchors.
  - Equalized

**A**nale

Redundant

No

**E**xtensions

Strong

Timely

- Keep master point above you. Give yourself room to work.
- Benefits of tying in with the rope v.s. PAS or sling.
- Belaying: Discuss and demonstrate proper belaying technique
  - Choosing a belay spot
    - Feeding rope with ATC and GriGri
  - Holding the fall
    - Protecting the leader
  - Belaying from above (guide mode)
  - Tying off a belay
- Rappel System (Anchor, Rope, Method)
  - Multiple rappel devices (including munter) and backing it up
  - Instructor Rappel (lower down the tether to master point)
  - Leader belayed releasable rappel (belay while they rappel)
  - o Fireman's belay
- Gear Placement: Discuss and demonstrate the best places to place gear. Taking advantage of rests.
  - Discuss and demonstrate proper placement of cam, nuts and tri-cams
    - Rock Quality

Orientation

Contact

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Security

- Where to anchor
- o Ground Anchors: there is a time and a place
- Station Management
- Weighted and Unweighted Belay Takeover
- Pick off

## Top Managed Single Pitch

- Lowering with ATC, Munter and GriGri
- Hauls
  - o 3:1 Haul
  - o Vector Pull
  - Drop Loop Haul

## Mock Lead for competency

- o 5.6 mock lead
- Mentor feedback on technique, gear placements and areas to improve
- Leading 5.6+
  - If appropriate, lead easy grades
    Mentor feedback on technique, gear placements and areas to improve

## Trip Planning & Leadership

The curriculum below establishes the minimum standards. Focus is placed on pre-trip preparation and planning for success.

## **Classroom Curriculum**

- Roles of the Leader: Guardian of Safety, Planner, Expert, Teacher, Coach, Initiator, Arbiter
- Organizing the Climb
  - o Research
  - o Setting goals and preparing for plan B, C, D
  - o Permits & Fees
  - Communication: internal and external
- Forming the Team
  - o Identifying Roles & Authority
  - o Experience
  - Compatibility
  - Number of participants
  - Planning for self-reliance
- Equipment
- Navigation
  - Map & Compass
  - Map Building with Caltopo
- Time Management
  - Trip planning and travel time estimates

## **Risk Management**

The curriculum below establishes the minimum standards. Focus is placed on understanding risk and managing hazards.

## **Classroom Curriculum**

- Safety
  - Ability and team dynamics
  - o Risk Tolerance: Sphere of acceptable risk
  - Seasonal hazards
  - Objective hazards
- Judgment & decision-making
  - Situational Awareness
    - Level 1-Perception: Critical factors (Physical, Environmental, Human)
    - Level 2-Comprehension: How do they relate to your goals
    - Level 3-Projection: What does it mean over time?
  - o Confirmation Bias: Luck or good decisons?
  - Sunk Cost Effect: Investment effects
  - Overconfidence Bias: We think we know more than we do
  - Recency Bias: more weight to recent outcomes
  - Breaking the chain of poor judgment
- Emergency Response Plan
  - Accident Response
    - Take Charge
    - Approach patient safely
    - Perform first aid
    - Protect the patient
    - Check for injuries
    - Make a plan
    - Carry out the plan
  - First Aid
  - Evacuation Plan

## **Mountaineering & Alpine Curriculum**

The curriculum below establishes the minimum standards. If time allows and students are interested we encourage you to expand on topics and techniques and/or introduce additional material.

### **Classroom Curriculum**

• Grade System: Grade I, II, III, IV, V, VI

Equipment: Introduce common gear, its anatomy and its function.

- Ice Axes Range from Mountaineering to Technical tools
- o Crampons Ice vs. Mountaineering and three binding systems
- Harness
- Helmet
- Headlamp
- o Boots Leather vs. Double Plastic. Integrated gaiter vs. non.
- Clothing: Introduce Clothing and layering systems
  - Upper body system
  - Lower body system
  - Footwear
  - Handwear
  - Headwear
  - Eyewear
- Packing: Proper packing techniques
  - Pack dump: demonstrate and explain the packing process
- Self Care: maintaining mental, emotional and physical health
  - Body temperature regulation and its importance
  - Medical concerns
  - Nutrition
  - Hydration
  - Positive Attitude
  - Teamwork
- Gear Check: Ensuring proper preparation and establishing a baseline for success
  - o Do a thorough gear check with each student
  - Allow time for them to rent additional items to complete their kit

## Skills Curriculum and Practical Session

- Traction: Discuss pros and cons of using traction and when to use each option
  - o Bareboot
  - Microspikes
  - Snowshoes
  - Crampons
- Uphill Crampon Technique: Explain the purpose of proper crampon technique. Different technique for different terrain
  - o Body Position balanced vs unbalanced. Two points of contact.
  - French Technique
  - o American Technique
  - o German Technique
  - International (Hybrid) Technique

- Downhill Crampon Technique: Pros and Cons of each technique.
  - Plunge Step
  - Quad Burner with toes pointed downhill
  - Downclimbing
  - Glissading
- Ice Axe: different grips and uses for each
  - Self arrest grip
  - Self belay grip
  - High dagger
  - o Low dagger
- Self Arrest: Demonstrate and explain the purpose of self arrest stopping an uncontrolled slide
  - Facing up, feet downhill
  - o Facing down, feet downhill
  - o Facing down, head downhill
  - Facing up, head downhill
- Efficient Uphill Travel: Practice each technique; both uphill and downhill travel. Aim for variable but safe terrain.
  - Rest Step using our bone structure to support weight
  - o Rotating muscle groups utilizing different techniques to maximize endurance
  - Compression breathing
- Belaying: Discuss and demonstrate proper belaying technique
  - Choosing a belay spot
    - Feeding rope with ATC and GriGri
  - Holding the fall
    - Protecting the leader
  - Belaying from above (guide mode)
  - Tying off a belay
  - Lowering with ATC
- Rappel System (Anchor, Rope, Method)
  - Multiple rappel devices (including munter) and backing it up
  - Instructor Rappel (lower down the tether to master point)
  - Leader belayed releasable rappel (belay while they rappel)
  - o Fireman's belay
- Running Belays vs pitching it out: Discuss and demonstrate when to use each technique
- Active protection techniques
  - Snow Anchors: Demonstrate and practice
    - Picket as a nail
    - Picket as a deadman
    - Snow Bollard
    - Ice Screws

## **Glacier Travel Basics**

• Understanding Glaciated Terrain

Glaciers

Crevasses

Berkshrund

- Organizing a rope-team
  - Strongest in front, weakest in middle
- Spacing for glacier travel

- o Never have two members over the same crevasse. Dependant on glacier size.
- Spacing for 2-man, 3-man, and 4-man rope teams.
- Storing excess rescue coils
  - Stacked in pack, Kiwi coil
- Practice travelling as a rope team
  - Rope on downhill side, Transitions at corners, Maintain spacing
- o Transitioning from snow to rock and back
- Taking a break: Where? When? How?
- Protection: Running belays, pitching it out, etc.
- Crevasse Rescue & Hauls
  - **3**:1 vs. 6:1 (emphasis put on 6:1)

## **Glacier Travel Advanced**

- Drop C Crevasse Rescue System
- Ascending a rope as a victim: Gri gri vs. atc vs. prussik
- Pulk preparation and travel
- Rappelling into a crevasse to administer first aid
  - Applying a chest harness to victim
  - Ascending the rope with ATC Guide out of a crevasse after first aid
- Long-term care for a crevasse rescue patient
  - First and secondary patient exam
  - o Treat ABC's and Bleeds
  - Burrito Wrap for Hypothermia
  - Monitor Vitals

## **Camp Selection & Construction**

- Overnight Equipment and sleep systems
- Discuss where a good placement for camp would be and considerations for objective hazards etc.
- Demonstrate how to build a shelf for your tent, how to construct a kitchen and bathroom
- Effective and efficient cooking techniques
- Creating snow/ice block walls
- Emergency shelters

## **Ice Climbing Curriculum**

The curriculum below establishes the minimum standards. Focus is placed on perfecting the rope skills and techniques learned in the previous focus area. As students progress, additional, more advanced techniques may be discussed and demonstrated throughout the ice climbing curriculum. Upon completion of this section, students should be dialed on the techniques of ice climbing in single and multi-pitch terrain; if their ability allows for safe climbing.

### **Classroom Curriculum**

- Difficulty: Discuss the standard WI system for grading ice
  Likelihood and consequence
- Understanding the medium: Discuss the unique characteristics of ice
  - Strengths vs. weaknesses
  - Types of ice and their visual cues
  - Active vs. Passive Protection
    - Uses of each
  - Webbing vs. Dynema
    - Strengths and weaknesses
    - Discuss when NOT to use each
  - o Quick Draws vs. Alpine Draws
- Transitions
  - o Tying into an anchor: munter vs. tether
  - Rope management
  - o One leader vs. swapping leads

## **Skills Curriculum and Practical Practice**

- Use of Ice Tools: Discuss and demonstrate proper use of ice tools
  - Gripping your ice tools
  - Swinging your ice tools
  - Good stick vs. bad stick
  - Reading the ice quality and features
- Use of Crampons: Discuss and demonstrate proper use of crampons
  - Kicking and placing front points
  - Flatfooting
  - Engaging secondary points for balance and stability
- Body positioning and movements: Discuss and demonstrate proper body positioning and movements.
  - Climb with your legs
  - Three points of contact
  - o High tools
  - Wide base and even feet
  - o Body position for stepping (butt out), swinging (hips in)
- Belaying: Discuss and demonstrate proper belaying technique
  - Choosing a belay spot
    - Feeding rope with ATC and GriGri
  - Holding the fall
    - Protecting the leader
  - Belaying from above (guide mode)
  - Tying off a belay

- Lowering with ATC
- Rappel System (Anchor, Rope, Method)
  - Multiple rappel devices (including munter) and backing it up
  - Instructor Rappel (lower down the tether to master point)
  - Leader belayed releasable rappel (belay while they rappel)
  - o Fireman's belay
- The Rack: Discuss and demonstrate how to rack
- Placing Protection: Discuss and demonstrate proper placement of an ice screw. Discuss and demonstrate the best practices of placing protection.
  - Gear conservation
  - Taking advantage of rests
  - o Protecting yourself and your second
  - o Protecting a ground fall
  - When to extend your draw
  - o Rope Drag
  - Protecting against "zippering" of your gear
  - Where to anchor
  - o Ground Anchors: there is a time and a place
  - Protecting your belayer and yourself when leaving an anchor
  - o Proper procedure for cleaning an ice screw and draw
- Demonstrate creating a v-thread and discuss the strength of ice
- Transitions
  - o Tying into an anchor: munter vs. tether
  - Rope management
  - o One leader vs. swapping leads
- Single, double, and twin rope techniques

## **Rock Climbing Curriculum**

The curriculum below establishes the minimum standards. Focus is placed on perfecting the rope skills and techniques learned in the previous focus area. As students progress, additional, more advanced techniques may be discussed and demonstrated throughout the rock climbing curriculum. Upon completion of this section, students should be dialed on the techniques of rock climbing in single and multi-pitch terrain; if their ability allows for safe climbing.

### **Classroom Curriculum**

- Grading Systems: UIAA, French, YDS, Australian, Brazilian, British
  - Likelihood and consequence
- Understanding the medium: Discuss the unique characteristics of rock
  - Strengths vs. weaknesses
  - Types of rock and their unique characteristics
- Active vs. Passive Protection
  - Uses of each
- Webbing vs. Dynema
  - o Strengths and weaknesses
  - Discuss when NOT to use each
- Quick Draws vs. Alpine Draws
- Transitions
  - Tying into an anchor: munter vs. tether
  - Rope management
  - o One leader vs. swapping leads

### **Skills Curriculum and Practical Practice**

- Use of Hands: Discuss and demonstrate proper use of hand grip techniques
  - o Crimps
  - Slopers
  - Pockets
  - Pinches
  - Jugs
  - Jams
- Use of Feet: Discuss and demonstrate proper use of your feet
  - Smear
  - Flagging
  - o Edging
  - Jamming
- Body positioning and movements: Discuss and demonstrate proper body positioning and movements. Climb with your legs - weight over your feet
  - Knee Drop
  - Counter Force: Stemming, undercling, lieback
  - o Counterbalance: Flagging
  - Mantle
  - Downpressure
  - Long Reaches
  - Exchanging placements

- Jamming
- Traversing, Exiting onto ledge, Down-climbing
- The Rack: Discuss and demonstrate how to rack
- Placing Protection: Discuss and demonstrate proper placement of cam, nuts and tri-cams. Discuss and demonstrate the best practices of placing protection.
  - o Natural, fixed, removable Protection
    - Rock Quality

Orientation

Contact

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**S**ecurity

- Leading and Multi-pitch rock climbing
  - Gear conservation
  - Taking advantage of rests.
  - o Protecting yourself and your second
  - Protecting a ground fall
  - When to extend your draw
  - Rope Drag
  - o Protecting against "zippering" of your gear
  - Where to anchor
  - o Ground Anchors: there is a time and a place
- Transitions
  - o Tying into an anchor: munter vs. tether
  - o Rope management
  - One leader vs. swapping leads
- Protecting your belayer and yourself when leaving an anchor
- Single, double, and twin rope techniques
- Self and Partner Rescue

## Ski Touring & Mountaineering Curriculum

The curriculum below establishes the minimum standards. Focus is placed on perfecting the uphill, downhill and transition skills and techniques. As students progress, additional, more advanced techniques may be discussed and demonstrated throughout the ski mountaineering curriculum.

### **Skills Curriculum and Practical Practice**

- Terrain
  - o Basics of avalanche terrain: Discuss aspect and slope
  - o Review environmental factors that influence the snowpack
  - Terrain traps
- Skinning and Uphill Travel
  - Pacing
  - Setting a skin track
  - Kick turns and turnarounds
  - Use of ski blades: Discuss when and where
- Transitions
  - o Proper techniques for making effective and efficient transitions
  - o Removing skins & storage
  - o Communication for downhill travel
- Downhill Travel
  - Spotting and bracing
  - o Differences between inbounds and outbounds
- Advanced Techniques
  - o Anchoring & belaying techniques
  - Rappelling
  - Lowering systems
  - Raising systems

## **AIARE 1 Avalanche Education**

The curriculum is established by the American Institute for Avalanche Research and Education. Students can expect to develop a good grounding in how to prepare for and carry out a backcountry trip, to understand basic decision making while in the field, and to learn rescue techniques required to find and dig up a buried person (if an avalanche occurs and someone in the party is caught).

### At the end of the AIARE 1 course the student should be able to:

- Plan and prepare for travel in avalanche terrain.
- Recognize avalanche terrain.
- Describe a basic framework for making decisions in avalanche terrain.
- Learn and apply effective companion rescue.

#### **Instructional Sessions**

- Introduction to the Avalanche Phenomena
  - Types and characteristics of avalanches
  - Avalanche motion
  - Size classification
  - The mountain snowpack: an introduction to metamorphism and layering
- Observations and Information Gathering
  - Field observation techniques
  - Snowpack tests: rutschblock, compression test
  - Avalanche danger factors or "Red Flags"
  - Observation checklist
  - Avalanche danger scale
- Trip Planning and Preparation
  - Avalanche terrain recognition, assessment, and selection
  - Route finding and travel techniques
  - Decision making and Human Factors
- Companion Rescue and Equipment

## **Equipment List**

This list will help identify necessary gear, clothing and equipment you will need to climb safely. This list is not complete but will recommend items you should consider purchasing as you will use them enough to justify the expense. Each focus area will require activity specific equipment and gear beyond what is listed here.

### **Recommended List**

Parka: 800 down filled

Hardshell Pants

Hardshell Jacket

Softshell Climbing Pants

Wicking Underwear & thermal underwear

Gloves

Mittens

Buff or balaclava

Goggles

Glacier glasses

Winter hat

Mountaineering Boots

Harness

Helmet

Ice Axe

Crampons

Belay Device: ATC

Prussiks [5]

Carabiners [6] non-locking, [5] locking

Double length runner Double length cordelette

Program Notes:	

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Program Notes:	

Course Feedback
We would appreciate your feedback and observations.
In what way was this program beneficial? If not beneficial, please explain.
At any time during the program did you feel you were in danger?
Do you have any suggestions on how we can improve the program?
What suggestions do you have for the mentor(s) to improve upon?