



Acadia Mountain Guides Climbing School



AMGA and PCIA accredited climbing school!

Information Packet For AIARE Level 2 Avalanche Course

Dates: Thursday, March 4th to Sunday, March 7th, 2010

Description: This course consists of both classroom and field sessions covering snow metamorphism, temperature gradients, hoar formation, observation and data collection, recording and interpretation of snow metamorphism. It focuses on detailed analysis and hazard determination of existing snow pack through layer and interface analysis, snowpack tests, and other means along with more practical travel and rescue skills.

Review of data classes and rescue skills (L1)

effects of temperature on the snow pack

surface hoar formation

recording standards

interpretation of the common tests

snow metamorphism

observation guidelines

snow testing methods

Prerequisites/Assumptions: This program is appropriate for people who have completed a basic avalanche course (preferably AIARE Level 1) and have some personal experience with snow packs. You should be familiar with the following:

recognizing avalanche terrain

planning a tour

basic testing techniques and observations

group management and decision-making

recognizing hazardous conditions

making weather and snow pack observations

basic route selection and route finding

rescue techniques

Meeting Location and Time:

Day 1: 12:00pm (noon). Meet at AMC Highland Center at the top of Crawford Notch on Route 302. Class will run until 19:30. **Day 2:** 08:30am. Meet at AMC Highland Center. **Day 3:** 08:30am. Meet at AMC Pinkham Notch Visitor Center in Joe Dodge Lodge on Route 16 between Gorham and Jackson. **Day 4:** 08:00am. Meet at AMC Pinkham Notch Visitor Center in Joe Dodge Lodge.

Lodging & Meals: There is a cafeteria at both location. For day 4, you should bring easy to eat trail foods such as Clifbars, raisens, peanuts, chocolate, etc. and enough fluid for yourself on tour.

Transportation: Provided by participants.

About AIARE: AIARE courses are consistent with the international standards and recording methods. AIARE instructors participate in annual training and network continuously with each other to learn about the latest information in avalanche science. Instructors are also AMGA certified alpine or ski guides who all have experience in a variety of snow packs. Courses flow sequentially from Level 1 to Level 3 regardless of where you take your class. AIARE courses teach you a way of thinking about snow travel rather than a protocol based approach to learning.

Instructor Credentials: Jon Tierney is an IFMGA guide, an AMGA certified ski mountaineering, alpine and rock guide, a Critical Care Paramedic, and an AIARE Level 1 and 2 Instructor. With a passion for rock, snow, and ice, Jon's accomplishments as a climber and guide include over sixty high altitude peaks as well as difficult first ascent rock and ice climbs and hundreds of multi-pitch rock and alpine routes throughout the Americas. He has been a wilderness educator for 20 years and teaches courses in avalanche science, wilderness travel, mountaineering, and technical rescue as well as wilderness medicine. Jon co-founded and directed the University of Maine outdoor program for eighteen years. He also owns Acadia Mountain Guides Climbing School. Jon began exploring outdoors and climbing in the mid 70s. His first expedition was hiking the Long Trail with a fellow 8th grader. Formerly he worked as a climbing and backcountry ranger

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at Rocky Mountain National park where he helped institute wilderness medical practices, and he has served as a search and rescue volunteer on North America's highest peak. Jon has experience in a variety of snowpacks and he strives to synthesize good concepts, challenge usual paradigms, and develop new ideas to raise guiding, wilderness medicine and wilderness leadership standards.

Assisting on the course will be Silas Rossi, an AMGA certified Rock and Alpine Guide and AIARE Level 1 Instructor.

Fees, Registration and Cancellations: \$375.00. Space is limited so register early to guarantee a spot and to help insure course runs. Late registrations will only be taken if course is running and space is available. Contact Acadia Mountain Guides Climbing School, 92 Main St., Orono, 207-866-7562.

A 50% deposit is required for registration. Balance due three weeks (21) before the beginning of program. Fifty percent (50%) of deposit is refundable if cancellation is made more than 21 days in advance. Cancellations made within twenty-one (21) days of program forfeit full tuition rate. A full refund will be given if Acadia Mountain Guides Climbing School must cancel the course.

Risk and Rescue: Enjoying the outdoors necessitates a certain degree of risk-taking. You are participating in this trip and entering the winter backcountry environment at your own risk. Ultimately, it is your responsibility to minimize various hazards through the application of good judgment gained from a foundation of education and experience. **In this course, you will be going into avalanche terrain and will be exposed to some level of avalanche hazard.** Some of the other hazards that can lead to injury associated with this trip include but are not limited to extreme cold, demanding physical travel, avalanche, vehicle transportation, skiing and camping. Please be sure that you are fully aware of such risks. Self-reliance in the face of adversity is expected on the part of the wilderness traveler entering the wilderness. Cellular phones and radios should not be relied upon in an emergency. While most risks cannot be completely eliminated, it is our goal to interpret the environmental, situational and group variables and to make educated decisions to minimize dangers to you while at the same time providing an enjoyable and memorable experience.

Personal Equipment Checklist – Avalanche Course ** = provided * = rental available

You need personal clothing for both being active and standing around in cold/snowy weather: We will be on the mountain for 4 – 6 hours some days. After you get the hole dug, pit work is somewhat sedentary so please dress accordingly.

Wicking layer - moisture transport and high insulative value (ie. Polypropylene, Comfortrel, Capilene - buy recycled if you can)

socks gloves Vapor barrier socks (optional)
 shirt pants

Insulating layer: recommended material: any type of pile (ie. Polartec) or wool is recommended. Cotton is not recommended as it is not thermally efficient when wet.

hat covering your whole head balaclava or neckwarmer
 medium weight jacket / light vest is nice too heavyweight jacket (down or synthetic)
 heavy socks mittens
 medium weight gloves pants with side zips preferred

Weather layer: recommended materials: sturdy rubberized rainwear in conjunction with lightweight nylon windwear or a waterproof /breathable fabric such as Gore-tex, Triple Point, etc.

jacket (with hood) and pants (side zips are helpful) 1 pair overmitts
 1 pr. gaiters Goggles and sunglasses

Footwear: double boots or equivalent *

Ravine access: Travel by either snowshoes, AT or Tele gear is appropriate.

Safety Equipment: Provided or you may bring your own.

collapsible shovel and probe
 avalanche transceiver (457 kHz or dual)

Observation Equipment: May be purchased from Alpenglow Adventure Sports at a 20% discount. Observation kit may be rented for \$25.00 (cards, screen, thermometer, ruler, loupe)

field notebook – Specialized avalanche record book or Rite in the Rain #911 Field Book is recommended

- ___ pencil
- ___ snow saw or folding pruning saw (approx. 40 cm blade). Best if can attach to shovel or pole
- ___ snow thermometer (graduated in degrees Celsius). Digital is more accurate but uses a battery.
- ___ crystal screen
- ___ snow pit cards (provided in course)
- ___ magnifying loupe
- ___ folding ruler (graduated in centimeters required. 2 meter length recommended)
- ___ compass
- ___ inclinometer
- ___ altimeter (RECOMMENDED)
- ___ pocket knife

- Other
- ___ day pack (large enough for all equipment on day trips)
 - ___ head lamp *
 - ___ Sunscreen and lip protection
 - ___ Small personal first-aid kit (sunscreen/lip-balm, moleskin, band-aids, medication, etc.)
 - ___ collapsible poles (optional) *

Gear Discount

You receive a 20% discount on avalanche materials and supplies purchased for this course and you receive a lifetime 10% discount coupon on all future purchases at Alpenglow Adventure Sports, our retail store in Orono and Bar Harbor, ME. This applies to website and mail order purchases as well. Ask about your coupon code for discounts at AlpenglowGear.com when making your reservation.

Required texts: Available from Alpenglow Adventure Sports at 20% discount.

The Avalanche Handbook, by David McClung and Peter Schaerer.
AIARE Field Notebook.

Sample Itinerary

Day 1:

Intros/Goals/Objectives/Limitations	Formation and Nature of Avalanches
Mountain Snowpack	Avalanche Terrain / L1 Review
Transceiver Check	Snow Profile Demo (Field)
Transceiver Review Exercise (Field)	Setup snow profile page and enter profile

Day 2:

Planning/Preparation Resources	Factors affecting snow stability
Recording field observations	Route finding session from slides
Review shear and stability tests, Discuss standards, procedures, and safety.	
Field Trip	- Avalanche terrain
	- Field observations
	- Test profile
	- Slope tests
	- Rescue exercise (if time and/or required)

Day 3-4:

Field Trip	- Route finding
	- Group management/safe travel
	- Test profile
	- Slope tests
	- Field observations
Review mountain snowpack and discuss current stability	
Common Errors Exercise	
Course Critique	

THANKS

We would like to especially thank Backcountry Access (BCA) and Ortovox for their support of our avalanche education program and encourage you to purchase their products.