

Avalanche Course: Level I

The goal of this course is to help you learn how to make your own decisions about safe backcountry snow travel. The Level I Course provides a complete introduction to the avalanche phenomenon, avalanche terrain, decision making, and rescue. This is an ideal first course for those new to travel in avalanche terrain and a great review or upgrade for anyone who has some experience or prior training but feels they need a skills "tune-up." The Level I is designed as a stand-alone course for backcountry travellers, serves as an introduction to avalanches and is a lead in to the Level II Course for those wishing to progress further. During the course we cover the following topics: Types of avalanches, characteristics of avalanches, an introduction to how avalanches form and release, avalanche terrain, trip planning and preparation, travel techniques, backcountry decision making and avalanche rescue.

This course fulfills the 2005 requirements of the AAA (American Avalanche Association) for a Level I course. The course also uses the curriculum developed by AIARE (American Institute for Avalanche Research and Education) and our instructors are AIARE trained educators. You may see other courses around that are two days in length but these do not meet any professional requirements and, we believe, give too much information in too short a time without allowing you to put into practice the skills and concepts presented.

Itinerary: The first day we'll start in the classroom with slides and lecture explaining the contributing factors in avalanche formation, followed by a closer look at the formation and characteristics of the mountain snowpack. Lecture topics also include types of avalanches, terrain analysis, decision making processes, and rescue aspects. The afternoon we'll car pool up to the snow to work on routefinding skills on snow, finishing the day with an introduction to avalanche rescue beacons. The second day will be spent also 50% in the field. After the morning lecture we'll be car-pooling to our day's location where we'll take a closer look at actual avalanche paths, trouble shooting potential routes of travel. The focus of the day is working on snowpack strength/bonding tests including: site selection, snowpack stratigraphy, identification of potential weak layers, and practice with instability tests. We'll end the day with more beacon practice. The final day we'll hone our skills on a short tour that will provide plenty of practice with bonding tests, routefinding, and beacon searches. We aim to conclude the day by 4.00 p.m.

Location: The course is held on-snow in the Bishop/Mammoth areas; in order to see the largest variety of terrain we'll be carpooling to various sites throughout the Bishop Creek and Rock Creek areas, potentially traveling as far as Mammoth depending upon the prevailing snow conditions. You should expect to drive 30-45 minutes each way from Bishop each day. We will facilitate car pools to the snow each day but you should make sure your vehicle is prepared for winter travel; carry chains even if you have a 4WD vehicle.

Meeting place and time: The course will meet the first day at 8.00 a.m. the White Mountain Research Station (WMRS) near Bishop. In Bishop, Line Street is an east/west street marked by the southern-most traffic light on Main Street/Highway 395, in town. To get to WMRS head east from this intersection on Line Street approximately 4 miles, crossing the Owens River bridge several miles out of town. About a half mile past the Owens River bridge WMRS comes up on the right. We'll be in one of the two class rooms that are through the gate, slightly to the right as you walk through.

Dates and Prices: Check the latest brochure, call us or go to our web site and locate on the first page the pull down menu for downloadable schedules and rates. Should minimum participant numbers not be reached you will be given the option of paying our private rate, rescheduling, or cancelling. Price includes instruction, permits, a syllabus and loan of avalanche beacons, shovels, and probes.

Ratios: The AAA suggests a ratio of no more than seven participants to one instructor for in the field sessions.

Notes and other information: The course does not include food or lodging. Please let us know if you need assistance making arrangements and you can refer to our local lodging information sheet for suggestions. WMRS offers dorm style lodging for \$30/night, to make arrangements call them at 760-873-4344; for more info see wmrs.org. (Food is not included but staying at WMRS is quite comfortable and convenient for these courses.)

If you want more information on what to look for in avalanche courses we suggest looking at the AIARE website at <http://www.avtraining.org> and the AAA website at <http://www.avalanche.org>.

Recommended precourse primer: <http://www.avtraining.org/studymaterialintro.htm>

Prerequisites: The course is not particularly physical but you will need to be able to be out all day in a range of weather conditions and you'll need to be able to use either cross country or alpine touring skis, or snow shoes. We will be travelling short distances on steep slopes. No prior snow stability evaluation training is required.

Equipment List for Avalanche Courses

The following list is a general guide and will assist you in packing for the program. Please do not hesitate to contact us if you have specific questions regarding equipment or if you need assistance prior to making a purchase. We have probes, beacons, shovels and saws to lend.

Essentials

- Beacon. This needs to be on the 457 frequency. We have these available if you do not have one.
- Shovel. Small collapsible style.
We have these available if you do not have one.
- Probe. These are a rescue necessity and also important to have for snow pack tests.
- Snow saw: a modern folding one or a pruning saw with a blade longer than 30cm is critical for snow pack bonding tests.
- On the snow transportation: this can be snowshoes or skis. With skis you will need skins. With snowshoes bring ski poles. For telemark and alpine touring rentals call Wilson's Eastside Sports (760) 873-7520 or Mammoth Mountaineering (760) 934-4191. We rent snowshoes.

Clothing

- 2 pair synthetic liner socks
- 2 pair heavier synthetic or wool blend socks
- Gaiters. Overboots are going to be the warmest, but regular gaiters will keep snow out.
- Long underwear top and bottom. Capilene or some other synthetic is most desirable.
- Warm pants or bibs. Pile or Expedition weight Capilene.
- Warm sweater top of some sort. Pile or Synchilla.
- Pile jacket.
- Good quality rain/wind pants and jacket. A full storm system will ensure you stay warm even on the coldest days. Bibs are good to avoid the gap between pants and top.

- Warm hat.
- Visor hat (for sun)
- Liner gloves.
- Shell gloves or mittens. Mittens are warm, but you lose dexterity.

Etc.

- Daypack. A pack of about 2000 cubic inches is plenty big enough.
- Sunglasses, high quality with keeper leash. The type with side shields are recommended. If you wear corrective glasses you might want a second pair.
- Sunscreen and lip screen. SPF 30+. Make sure the lip stuff actually contains a sunscreen. A 1oz. bottle will be sufficient
- One 1-quart plastic water bottle with insulating jacket.
- Thermos for a hot drink during the day.
- Headlamp with extra batteries and bulb
- Camera, film and spare batteries.
- Binoculars are handy, but not essential.
- Notebook and paper. The waterproof style of notebook is good for inclement weather.
- Goggles and a face mask are great if it becomes stormy.

Food

- Snacks and lunch for all three days. The first day it will be possible to buy lunch in town.

Recommended reading:

- Tony Daffern, *Avalanche safety for skiers and climbers*, 1999 (second ed.) Mountaineers Books, Seattle, WA. Probably the best all around book for the Level I course.
- Fredston and Fresler, *Snow Sense*, Alaska Mountain Safety Center, 1994. A basic book but good.
- Jamieson, Bruce, *Backcountry Avalanche Awareness*, Snowline Technical Services, Calgary, Canada, 1997. Also available from the Canadian Avalanche Association in Revelstoke, British Columbia.
- McClung and Schaerer *The Avalanche Handbook*, The Mountaineers, Seattle, WA.

Wilson's Eastside Sports in Bishop will have these books available for sale.