

American Alpine Institute^{Ltd.}

MOUNT WHITNEY SKILLS AND CLIMBING COURSE

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Temperatures and weather conditions in the Sierras can change quickly, so during this program you will need to be prepared for anything, even snow in mid-summer. But generally we have fine warm days with cooler nights and the potential for afternoon thunderstorms. Lows at night often drop to slightly below the freezing point with daytime highs ranging up to 80°F at lower elevations.

The equipment you bring must function well in a wide variety of conditions. Your clothing should be warm and lightweight, dry quickly, and allow good freedom of movement. The layering principle, based on several thin layers of insulation (rather than one thick one), covered with an outer weather-proof shell, meets these needs well. On cool or cold days, Sierra mountaineers typically will wear a layer of polypropylene long underwear, an insulating layer of pile or fleece when necessary, and a Gore-Tex shell in windy, wet, or colder conditions.

During this course we normally spend the first day rock climbing at local crags easily accessible by car. We then camp at a nearby campground before heading into the mountains for the next three days. Course participants normally pair up before the course or at the rendezvous to discuss sharing the use of tents and stoves in order to save weight.

City clothes and other odds and ends which you won't need during your course can be left in the vehicle or hotel. Bring a duffel and lock for this purpose. Please take the time to prepare your equipment carefully, and if possible, become familiar with it by using it in the field prior to your program. If you have any questions don't hesitate to call the Institute office or equipment shop (360-671-1570). We'll be happy to help you with big questions or little details. Please use us as a resource as you prepare for your program.

CLOTHING

Boots - Due to snow levels and frequent freezing temperatures, mountaineering boots are mandatory for early season through mid-June. Plastic boots are the standard for winter conditions and heavy snowpack. Heavy duty leather mountaineering (not hiking) boots are recommended in some cases since they are comfortable on the trail, adequate on the snow and good on the rock. While there are many manufacturers of leather mountaineering boots, we have found the following companies' boots to be best suited to alpine mountaineering: Scarpa, Asolo, La Sportiva and Lowa. Whichever boot you choose, remember that they must be designed for heavy duty mountaineering with at least a 1/2 length steel shank, and be compatible with crampons. They should also be thoroughly waterproofed and broken in; this means that you should wear them enough so that your feet will remain blister-free, and they should fit comfortably walking down steep terrain with a 50 pound pack. Please keep in mind that there are many rugged mountaineering boots that are not suitable for this program. Please call our Equipment shop if you have any questions about your purchase of mountaineering boots.

Gaiters - Calf/knee height. Be sure they fit your plastic and/or leather boots snugly.

Running, Tennis, or Lightweight Approach Shoes - For approaches and climbing after mid season. Models like the La Sportiva Boulder, Five Ten Mountain Master, and other sticky rubber approach shoes work well when there is no snow on the approaches or routes (after mid June).

Socks - Wool or synthetic (no cotton). Bring two complete changes. Climbers frequently wear a thin liner sock, and one or two pair of thick socks depending on boot fit. Bring a thin pair of liner socks to be worn under rock shoes if so desired.

1st Layer (Top and Bottom) - Long Underwear. This will be your base layer and should be lightweight, tight fitting polyester, polypropylene, capilene, or similar synthetic.

2nd Layer (Top) - Expedition weight long underwear top, 100 weight powerstretch, very light weight fleece, Schoeller, or a lightweight windshirt (i.e. Marmot DriClima) are good examples of this multi-use layer.

2nd Layer (Bottom) - Schoeller, Pile or fleece preferred. Seek out quick-drying and wind/water resistant material. Black Diamond Alpine Pants and Arc'teryx Gamma LT Pants are good examples of these types of materials.

Warm Jacket - Pile, fleece or Windstopper.

Insulated Jacket - Lightweight down or synthetic in addition to the warm jacket described above. Some good examples of insulating materials are Primaloft, Polarguard 3D or any down jacket/parka. This is different than your outer most waterproof shell jacket. Needed only in the earlier part of the season (before July) or for the late season (after Sept 15).

Rain Pants or Bibs - Gore-Tex or other waterproof breathable material recommended. Full side zips recommended for easy on and off over boots and crampons.

Rain Parka with Hood - Gore-Tex or other waterproof breathable material recommended.

Liner Gloves - Polypropylene / polyester.

Modular gloves or mittens - For early season climbs until mid June. Glove systems should include a heavy insulated liner and a waterproof shell. Good models are made by Outdoor Research, Black Diamond, Wild Country and others. (When these glove are required you will still need to bring the polypro gloves.)

Shorts - Lightweight runners shorts are best. Often worn over your lightweight long underwear.

T-shirt - Synthetic like duofold or similar fast drying light weight style of t shirt is preferable.

Warm Hat - Synthetic is less itchy than wool and dries faster.

Sun Hat - A baseball cap serves well.

CLIMBING GEAR

Ice Axe - (for early season ascents into June) 60 to 70 cm with a standard pick and wrist loop. If your axe doesn't have a wrist loop, pre-sewn ones are available commercially or you can bring about 6 feet of 1 inch webbing and we'll tie it on the course.

Crampons - (for early season ascents into June) 12-point semi-ridged. Be sure they fit and flex with your boots. Crampons with step-in bindings should be used only with plastic boots and leather mountaineering boots that are specifically manufactured to be step-in crampon compatible. The Black Diamond Sabertooth, Grivel 2F and Charlet Moser Black Ice models are recommended.

Climbing Harness - Should fit over bulky clothing. Adjustable leg loops help in this regard.

Rock Shoes - For routes on Mount Whitney other than the Mountaineers route. Rock shoes should be comfortable all day shoes and should fit with a pair of thin socks on.

Carabiners - Bring four, two of which should be large, locking, pear shaped (or MÜNTER) biners.

Climbing Helmet - Kayak, bicycle or construction helmets are not acceptable.

Belay/Rappel Device - Required. Black Diamond ATC's and Wild Country Belay Devices work well.

CAMPING GEAR

Tent - Lightweight 4-season tent capable of withstanding winds to about 40 mph and continuous, multi-day rain. We normally pair up in tents so if you don't have one, you may be able to share a rental.

Sleeping Bag - Down or synthetic, rated to about 25°F (or 15° if early season). Bring an extra large plastic garbage bag with which you can line your sleeping bag stuff sack and use for storage in the tent.

Sleeping Pad - 3/4 or full length closed cell or Thermarest.

Stove - Pump type, white gas stoves, such as the MSR models are preferred. Bring a cleaning needle. Compressed butane or propane stoves are acceptable. Course participants often pair up on stoves. Due to airline restrictions** you may not bring used fuel bottles on the airline. If you already own a MSR stove bring it and your pump and AAI will loan you a fuel bottle. If you do not own a stove you can rent everything.

**United Airlines has indicated that backpacking stoves with detachable fuel containers may be taken on board, but only the stove itself (the fuel container-new or used- MUST be left at home). The stove must be air dried of any fuel and be sent via checked baggage, not carry on. Further information on this regulation may be found by a United Airlines employee under Hazardous Materials: Camping equipment; footnote.

Fuel Bottle** - Leak-proof bottles such as Sigg or MSR are best. Can be rented or loaned if you already own a stove.

Fuel - 1 1/2 liters is sufficient for 12 days for one person. White gas can be purchased in Bishop. (As a reminder, fuel cannot be taken on airplanes.)

Pots - One 1 1/2 or 2 quart pot is enough for one person. Two people sharing a stove should bring two pots.

Utensils - Large thermal mug (pint size best) and spoon minimum. Most also bring a bowl.

Lighters - Bring two.

Water Bottles - Bring two 1 quart wide-mouth.

Water Purification - Bring tablets such as Potable Aqua or use a filter pump. If you bring a pump it is recommended to bring tablets as a back up.

MISCELLANEOUS

Food - Use the MENU PLANNING CHART as an aid. See MEAL PLANNING FOR ALPINE MOUNTAINEERING for food suggestions.

Large Pack - Large internal frame pack, minimum 5000 cubic inches is recommended.

Summit Pack - Large, 1500 to 2000 cubic inches. Optional. For climbing days it can be nice to have a smaller lighter pack on your back.

Ski/Trekking Poles - Optional, but recommended. Telescoping/variable length to assist with carrying heavy loads, crossing streams, and easing stress on knees and back particularly on steep trail or talus descents. If you have regular downhill ski poles, they will work.

Headlamp - Bring an extra bulb and batteries. Flashlights are not adequate.

Pocket Knife - Swiss Army style knives are good as well as Multitools like the Leatherman.

Compass - Liquid filled. Appropriate USGS topographic maps can be purchased in Bishop.

Repair Kit - Needle and thread, a moderate amount of adhesive/duct tape, stove repair kit, Thermarest repair kit, 20 to 40 feet of heavy cord (for hanging food out of the reach of animals), crampon adjustment tools as needed for your crampons.

Personal Medical Kit - For blisters, cuts, scrapes, etc. Bring a full blister kit with plenty of mole-skin, tincture of benzoin, Second Skin TM, CompeedTM pads (or other bioclusive coverings), topical antisthetic and antibiotic gel or ointment, and 1"-2" athletic adhesive tape.

Insect Repellent

Glacier Glasses - With side shields.

Sunscreen & Lip Protection - With a protection factor of at least 16. For the fair an SPF of 20 is better.

Personal Toiletries - Bring one roll of toilet paper. Smaller amounts can be rolled off and taken into the mountains as needed, while the "main supply roll" can stay safe and dry in the course vehicle.

Garbage Bags - Bring two or three large ones. They serve a variety of uses.

Stuff Bags - Bring a few of varying sizes to help keep your gear or food organize.