

American Alpine Institute^{Ltd.}

SIERRA NEVADA ALPINE ROCK CLIMBING EQUIPMENT LIST

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Temperatures and weather conditions in the Sierra can change quickly so come prepared for anything, even snow in mid-summer. But generally the norm is for 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.

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. Typically, Sierra mountaineers will wear a layer of long underwear made from polypropylene or a similar synthetic for protection from both the sun and elements, an insulating layer of pile or fleece when necessary, and a Gore-Tex shell in extreme conditions.

During this course we normally spend the first three days rock climbing at local crags easily accessible by car. We camp in nearby campgrounds before heading into the mountains for the final major ascent. To save weight on tents and stoves, course participants normally pair up to share for this latter portion.

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, perhaps on a backpacking trip. If you have any questions don't hesitate to call the Institute office or equipment shop (360-671-1570).

CLOTHING

Boots - Modern leather climbing boots are recommended. Models such as the La Sportiva Makalu or Trango work well. Leather boots must be designed for heavy duty mountaineering with at least a 1/2 length steel shank, and they should be broken in and thoroughly waterproofed.

Gaiters - Calf height. OR Crocodiles are a great example.

Running, Tennis or Lightweight Approach Shoes - For approaches and around camp.

Rock Shoes - Get a pair that you can wear comfortably for the entire day and that are not too tight. Remember that what feels bearable in an air-conditioned shop on carpet may prove to be agony in the full sun after several hours.

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.

Long Underwear Bottoms - Lightweight polypropylene or similar synthetic. Often worn with shorts for sun protection.

Warm Pants - Early and late season only. Lightweight pile or fleece preferred.

Climbing Pants - You should be able to move freely in these pants. A Lycra, Schoeller, or similar type pant like the Black Diamond Alpine Pant, Outdoor Research Granite Pant, or Arcteryx Gamma climbing pant styles are great for climbing and approaching.

Rain Pants or Bibs - Gore-Tex or other waterproof breathable material recommended. Full side zips recommended for easy on and off over boots. Lightweight styles such as Marmot and Cloudveil systems are preferred over heavyweight types

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

T-shirt

Long Underwear Tops - Lightweight polypropylene or similar synthetic.

Pile Jacket - Synthetic pile or fleece.

2nd Warm Layer - 100 weight powerstretch, expedition weight long underwear or similar weight synthetic fabric.

Rain Parka with Hood - Gore-Tex or other waterproof breathable material recommended. Lightweight styles such as Marmot and Cloudveil systems are preferred over heavyweight types.

Gloves - Polypropylene or wool. No leather.

Heavy gloves - Synthetic, such as pile. (eg. Outdoor Research or Marmot)

Warm Hat - Synthetic is less itchy than wool.

Sun Hat - A baseball cap serves well.

CLIMBING GEAR

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

****Ice Axe** - 60 cm to 70 cm length with standard toothed 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 9/16 inch tubular webbing and we'll tie it on the course.

****** Depending on snow conditions and the specific itinerary designed by your guide you may or may not need an ice axe. Please bring an axe if you own one, otherwise contact our office in regards to the need for an axe on your program and rental options.

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

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

Belay Device - Bring one if you have one, but you don't have to buy one for the course. If you want to get one, be sure to get advice on choices from the Equipment Department. (Black Diamond and Wild Country both make exceptional belay devices.)

CAMPING GEAR

Shelter - Lightweight 3-season tent capable of withstanding winds to about 40 mph. We normally pair up in tents so if you don't have one, you may be able to share a rental. The

tent will be necessary only if the weather is marginal but using a bivy sack is preferable if the weather is fine. A Gore-Tex bivy sac is required for this.

Sleeping Bag - Down or synthetic, rated to about 25 F.

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.

Fuel - 1 pint is sufficient for 1 night for two persons. Bring more for the car camping days. * (As a reminder, fuel cannot be taken on airplanes.)

Fuel Bottle - Leak-proof bottles such as Sigg or MSR are best.

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.*

Pots - One 1 1/2 or 2 quart pot is enough for one person. Two people sharing a stove might want to bring two pots if their meals are significantly different.

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

Lighter

Water Bottles - Bring two 1 quart wide-mouth.

Water Purification - Bring tablets such as Potable Aqua or use a filter pump.

MISCELLANEOUS

Food - On the five day course you will be car camping 3 nights and up at a high camp (to which you must carry your food, about 6 miles) for the final night. Plan accordingly. See MEAL PLANNING FOR ALPINE MOUNTAINEERING for food suggestions.

Overnight Pack - Large, 3000-4000 cubic inches. This can also double as a summit pack. Large enough to carry personal gear for one night plus group climbing gear.

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

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

Appropriate USGS topographic maps. These can be purchased in Bishop.

Repair Kit - Stove repair kit, Thermarest repair kit, needle and thread.

Personal Medical Kit - For blisters, cuts, scrapes, etc.

Insect Repellent

Glacier Glasses - With side shields.

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

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

Personal Toiletries - Bring half a roll of toilet paper or less.

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

Camera - With lots of film and an extra battery.

Heavy cord - Bring about 20 to 40 feet for hanging food out of the reach of animals.