



American
Alpine Institute

The Spirit of Alpinism

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TECHNICAL ROPE RESCUE LEVEL 1 OPERATIONS AND LEVEL 2 TECHNICIAN Bellingham, WA EQUIPMENT CHECKLIST

The primary goal of any alpine climber should be to carry as little as necessary. What is left out of a backpack is often just as important as what is placed inside. Conditions in the mountains vary dramatically from season-to-season. This can make the process of selecting equipment for an alpine climb difficult. On the one hand, a climber wants to be light. But on the other hand, a climber wants to have everything they need if there is a storm or other emergency.

This list was designed for the “worst case scenario,” a trip with significant inclement weather. In serious conditions it's not uncommon for a climber to need every piece of clothing and equipment on this list. However, if a program does not encounter significant weather, there may be items here that are not used. As you prepare for your trip, it's important to plan for the worst and hope for the best.

On the first day of your program, an AAI guide will work with you to refine your mountain kit to ensure that you bring exactly what's needed given the forecast. It is acceptable to bring too much clothing or equipment to your initial meeting. And it is acceptable to bring things that you have questions about. Extra equipment can always be left behind at the AAI shop.

The Cascade climbing season is defined as May 1st through October 1st. This list references Early, Mid, and Late-season conditions. These periods of the climbing season are roughly defined by the different types of weather and snow conditions you are likely to encounter:

- **Early-Season Conditions** (May 1st-July 1st): There is usually significant snow both on the ground as well as on the glaciers. Climbers should expect to encounter deep, wet snow during the day and firm conditions at night. Overnight temperatures range from 15-degrees to 40-degrees Fahrenheit (-9-4C). Daytime highs range from 35-degrees to 70-degrees Fahrenheit (1-21C). Precipitation as snow or rain is likely in the early season.
- **Mid-Season Conditions** (July 1st-September 1st): Temperatures range from 40 to 50-degrees Fahrenheit (4-10C) at night, with occasional dips down below freezing. Daytime temperatures often reach 70-degrees Fahrenheit (21C). Climbers should expect the possibility of freezing temperatures above 9000-feet on summit days throughout the summer season. And though mid-season tends to be dryer in the Cascades, the possibility of rain is still always there.

- **Late-Season Conditions** (September 1st-October 1st): September is a varied month. Temperatures begin to drop both during the day and at night. Late in the month, it is possible that you will encounter an increase in snow or rain.

Please be sure to check the forecast several days prior to your course to ensure that you are properly prepared.

[NOAA Mt. Baker-Snoqualmie National Forest Weekly Forecast](#)

PROVIDED EQUIPMENT: Climbing rope, anchors, solid waste bags

RENTALS: Equipment that is available for rent through the AAI Equipment Shop is designated with a “Rent” check box. These items may be rented on the first morning of your course during your rendezvous. It is possible to reserve rentals ahead of time, but due to an extensive inventory, reservations are not necessary. Please call the shop if you have unusual sizing issues (either large or small), as those items are limited.

Underlined items in this form are hyperlinked to examples available in our Equipment Shop.

Call or Email the Equipment Shop for Advice on Gear

Please feel free to contact us to help you get ready for your climbing trip. Your comfort and safety depend on being well equipped. Whether you get your gear from us or just get advice, we’re here to help you prepare.

Call: (360) 671-1570 Email: shop@AlpineInstitute.com

Equipment Shop Website: Shop.AlpineInstitute.com

Clothing	Packing Checklist
<p>Sun Hat Ideally fits under your climbing helmet. Baseball style hats with a button on top are generally not recommended. Visors or athletic hats from companies like Ciele or Skida are substantially more comfortable, vent better, and are easier to clean and dry out.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Sun Glasses Preferably with UVA/UVB protection</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Sports Bra Wool or synthetic, comfort is key. Avoid bras with adjusters and clasps that could get compressed by your pack straps. Racerbacks are popular options for keeping straps in place. ★ <i>Examples: Girlfriend Collective Topanga, Vuori Elevation.</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Sun Hoody A lightweight, wool or synthetic sun hoody is ideal. Look for one with UPF 30+ sun protection. UPF Clothing protects better from the sun than sunscreen. ★ <i>Examples: Patagonia Capilene Cool Daily Hoody, Outdoor Research Echo, Rab Pulse</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy

<p>Active Insulation Layer Lightweight “gridded fleece” or lightweight synthetic insulated jacket. Hood preferred. ☆ <i>Active insulation jacket weight at 40g/m2 and heavier Insulation jacket at 60g/m2 or 80g/m2</i> ☆ <i>Example: Patagonia R1, Patagonia Nano Air, Arc’teryx Proton LT</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Soft Shell Jacket or Windproof Jacket A soft shell jacket is considered an ‘action layer’. Its materials are designed to stretch and breathe while also maintaining wind and water resistance. This allows the user to leave this jacket on for a wide range of temperatures and conditions throughout the day, without the hassle of constantly changing layers. Wind proof jackets are lightweight and packable, but lack the breathability and stretchy nature of the soft shell. Windproof jackets are ideal for blocking wind and light precipitation during low output activities. ☆ <i>Example SoftShell: Black Diamond Alpine Start Hoody, Rab Borealis, Mountain Equipment Squall, Patagonia Houdini Air.</i> ☆ <i>Example Windproof Jacket: Patagonia Houdini, Arc’teryx Squamish Hoody,</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Insulation Jacket AKA the “puffy.” Down or Synthetic. This piece is worn in cold conditions or when not moving. Hood preferred. If choosing Down, water-resistant Down treatment is preferred to help prevent matting and loss of insulating ability if the jacket gets wet. ☆ <i>Example: Arc’teryx Nuclei FL, Patagonia DAS light, Patagonia Down Sweater, Arc’Teryx Cerium LT.</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Hard Shell Jacket (Waterproof Rain Jacket) Non-insulated jacket with a waterproof and breathable membrane. 3-layer construction is recommended. It must have a hood, ideally a helmet compatible hood. When sizing make sure it can fit over other layers. Ski jackets are discouraged because they are usually not waterproof and have heavy insulation. ☆ <i>Materials: Gore-Tex, eVent, Drilite, H2NO, Pertex Shield</i> ☆ <i>Example: Patagonia Torrentshell, Arc’Teryx Alpha AR, Mountain Equipment Lhotse.</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<p>Undergarments Wool or synthetic. Long, compression style undergarments can help reduce inner thigh chafing.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Soft Shell Pant Thin, weather-resistant, breathable, and stretchy. You will wear these a majority of the trip. ☆ <i>Materials: Exolite, Fortius, Schoeller</i> ☆ <i>Example: Patagonia Altvia, Mountain Equipment Ibex, Arc’teryx Gamma FL</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Hard Shell Pant (Waterproof Rain Pants) Non-insulated, waterproof and breathable membrane. Full side zips are recommended.. When sizing make sure it is able to fit over a base layer and soft shell pants. Insulated ski pants are strongly discouraged due to lack of waterproofness and heavy insulation. ☆ <i>Materials: Gore-Tex, eVent, Drilite, H2NO, Pertex Shield.</i> ☆ <i>Example : Patagonia Torrentshell, Arc’Teryx Beta Pant</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<p>Socks Wool or synthetic socks that are at least mid calf height. Modern boots are designed to insulate your feet, so a thick sock is not recommended as these tend to lead to blisters and moisture retention. Using a lighter weight sock allows for a more accurate boot fit. Wearing a “silk-weight” liner sock beneath your hiking sock can reduce friction on the skin and mitigate blister development. 3 pairs is generally sufficient. ☆ <i>Example : Darn Tough Coolmax Lightweight</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy

<p>Approach Shoes Made with sticky climbing rubber. Ideal for traction near cliff edges. ★ <i>Example Approach: La Sportiva TX4, La Sportiva TX2, Scarpa Rapid</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Comfortable Pants or Shorts Comfortable cotton clothing that will be used in the classroom and for car camping.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<h2 style="margin: 0;">Climbing</h2>	
<p>Harness Make sure the harness has a belay loop and gear loops. When sizing, it should fit over your clothes when you have multiple layers on. ★ <i>Example : Petzl Adjama, Arc'Teryx AR-395a</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<p>Helmet Must be UIAA rated for climbing. Be aware that foam, break-away style helmets like the ones listed below are susceptible to damage if being loaded in a checked bag. ★ <i>Example : Petzl Meteor, Black Diamond Vision.</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<p>Slings Bring one 48" (120cm) and one 24" (60cm) pre-sewn nylon slings. Must be UIAA rated for climbing. Available for sale in our equipment shop. ★ <i>Example : Mammut Contact, Black Diamond Nylon Runner</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Tubular Webbing One 12-foot section of tubular webbing and one 5-foot section of tubular webbing. The 12-foot section is for a chest harness. If you have a full-strength chest harness, it may be used instead of the 12-foot section of webbing.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Cordelette Bring at least 21 feet of 7mm perlon/nylon climbing cord.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Purcell Prusik Purcell prusiks are specific prusik cords used in rescue applications. Most people will require 32.5-foot (10 m) of 6mm prusik cord. (Precut lengths are available for sale at AAI.) We will make these in the class. They do not have to be pre-rigged.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Belay Gloves Lightweight and breathable glove with a durable leather palm. They protect your hands from rope burn, pinching, and sharp elements. ★ <i>Example : Petzl Cordex</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Belay Device Bring an auto-blocking device that accepts two ropes. Available for sale in our equipment shop. ★ <i>Example : Black Diamond ATC Guide, Petzl Reverso</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Carabiners Must be UIAA rated for climbing. Available for sale in our equipment shop. - Four large pear shaped munter-style locking carabiners. - Five non-locking wire gate carabiners. ★ <i>Example : Petzl Attache, Camp Photon Wire</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy

<p>Rappel Backup The Sterling hollow Block or Beal Jammy are recommended for their heat resistant properties. A 4ft length of 6mm nylon accessory cord will also suffice. If you have two, bring them. ★ <i>Example : Beal Jammy 35mm, Sterling HollowBlock2 13.5</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Trekking Poles One is required, two are highly recommended. Poles help with balance while hiking with a heavy bag and increase security during stream crossings. They also decrease the pressure on your knees during steep descents. For early season programs, your poles should have snow baskets. ★ <i>Example : Black Diamond Expedition 3</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<p>Day Pack 30L to 50L is a recommended size range. Ideally fits all of your necessities for the day including climbing equipment. ★ <i>Example : Black Diamond Mission 55, Black Diamond Creek 50, Blue Ice Warthog 45</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Hydration 2L capacity is recommended, though some people need more. A common approach is to bring a 1-2 liter bladder and a 1 liter hard sided bottle. The bottle is an important backup to the bladder if it gets punctured. ★ <i>Example : Nalgene 32 oz bottle, Hydrapak Seeker</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Food You are responsible for your own food for the duration of the course. Please consult our meal planning page.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<h2 style="margin: 0;">Other Essentials</h2>	
<p>Technical Rescue Riggers Guide 3rd edition by Rick Lipke.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Notebook A small Right-In-The-Rain notebook and mechanical pencil work best.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Headlamp Bring extra batteries or if it has a rechargeable battery make sure and bring a charger. 200-350 Lumens is an ideal range.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Hand Sanitizer and/or Wet Wipes Required. Used after going to the bathroom and before eating. Wet wipes can be used for the “mountain shower.”</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Pee Cloth (optional) A reusable, antimicrobial pee cloth. Used in place of toilet paper or wet wipes for cleanup. ★ <i>Example : Kula Cloth</i></p>	

<p>Sunscreen At least SPF 30+, zinc based is preferred. Small travel size tubes are recommended so you can put them in a close by pocket for easy access. ★ <i>Example : ZBlok 45, 2oz containers are a nice size.</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Lip Balm Make sure it is SPF rated. ★ <i>Example : Blistex Gold Five Star Protection SPF 30</i></p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Personal First Aid Kit</p> <ul style="list-style-type: none"> <input type="checkbox"/> Band aids <input type="checkbox"/> Blister treatment <input type="checkbox"/> Prescription drugs <input type="checkbox"/> Ibuprofen etc. <input type="checkbox"/> If you wear contacts make sure and have spares if you can't see without them. 	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Repair Kit</p> <ul style="list-style-type: none"> <input type="checkbox"/> Inflatable sleeping pad patch kit <input type="checkbox"/> Duct tape (Can be wrapped around trekking poles or water bottle. Gorilla Tape tends to be the best brand for the mountains.) <input type="checkbox"/> Zip ties <input type="checkbox"/> 6-10 ft of 3mm accessory cord <input type="checkbox"/> 2 Trash bags that are big enough to line the inside of your pack with. 	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Other Optional Items</p> <p><i>The items below are not required, although many are nice "luxury" items that can make your expedition more enjoyable. Remember that a few ounces here and there add up to extra pounds on your back and knees during your expedition.</i></p>	<p>Packing Checklist</p>
<p>Additional Optional SAR Equipment If you have equipment that you would like to practice with, please bring it. During the first nine days of the program, we will determine whether we want to bring it into the mountains for the last four days.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Insect Repellent Biting insects such as mosquitoes and blackflies can be prevalent during different times of the season depending upon conditions and location. This is a nice item to have just in case. Sometimes even a headnet is a nice item to have.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<p>Car Charger Consider bringing an extra battery pack as well, having a lot of people using car charger cables is difficult.</p>	<input type="checkbox"/> Own <input type="checkbox"/> Buy