

Mountaineering Course Equipment List

This course is designed to give you the experience and skills to begin mountaineering on your own. Our course areas include North Cascades National Park and Mt. Baker.

We will do an equipment check at the start of the trip but it is important to work out any gear issues in advance of this due to the remote starting location. If you have two different items you are debating between, and you have room in your luggage to do so, bring both and we will sort through them with you at the equipment check.

NMS will provide all of the group (anything used by multiple people) camping, cooking and climbing equipment. Personal equipment (anything used just by yourself - i.e. sleeping bag, crampons, etc) is not included.

Items included in this list are required. However, the specific products listed as examples are not. The examples listed below are the products we use ourselves. Comparable products from other manufacturers are sufficient as well. If you have any questions, feel free to contact our office.

Items marked with a **(R)** are available to rent from NMS. Quantities are limited and available on a first-come, first-served basis. If you would like to rent gear from NMS please return the rental form that was included in your pre-trip email. If you rent gear from NMS your guide will bring it to the start of the program for you. Items marked with an **(O)** are optional.

Climbing Equipment

- Backpack (R):** Internal Frame 60-75 L Pack. Look for a simple, light pack that fits you well. Capacity listed by manufactures seems to be a bit subjective. Please keep in mind that you will be given some group gear to carry. There should still be room in your pack after all of the gear on this list is loaded into it. i.e. Cilo Gear 60 or 75 L WorkSack
- Ice axe (R):** 50-65 cm i.e. Petzl Sum'tec, Summit or Summit Evo.
- Crampons w/Anti-Balling Plates (R):** These should be a 12-point general mountaineering crampon. i.e. Petzl Vasak w/ Flexlock, Leverlock Universel Filflex or Leverlock Universel Fil mount system (depending on your boot)
- Alpine Climbing Harness (R):** i.e. Petzl Altitude or Petzl Sitta
- Climbing Helmet (R):** i.e. Petzl Sirocco or Petzl Meteor
- Belay/Rappel Device (R):** i.e. Petzl Reverso 4
- 2 Locking Carabiners (R):** i.e. Petzl Attache
- 2 Non-locking Carabiners (R):** i.e. Petzl Ange L
- Collapsible trekking poles with powder baskets (R):** Black Diamond Alpine FLZ or Distance FLZ Trekking Poles. *Powder baskets are usually not included with poles and will need to be purchased separately.
- 24' of 6mm Perlon cord:** This should be 1 piece of continuous cord, we will cut this into prussiks on the course. If you already have prussiks made you could bring those instead.
- 1 Double Length Sewn Sling:** i.e. Petzl Fin'anneau 120 cm
- Ascender(O):** This is optional for people prepping for climbs like Denali, Cho Oyu, etc. This can be a right or left-handed ascender. i.e. Petzl Ascension

Camping Gear

- Sleeping Bag (R):** 19° to 30°F down or synthetic sleeping bag. i.e. Patagonia 850 Down Sleeping Bag
- Compression Stuff Sack (R):** You have to work a bit, but not too hard, to squeeze your bag in. The compression stuff sacks have camming straps that allow you to compress the sack once stuffed. Some stuff sacks are lighter than others. i.e. Outdoor Research Ultralight Compression Sack
- Inflatable Sleeping Pad:** Short length. i.e. Thermarest Pro Lite
- Optional 2nd Sleeping Pad - Closed Cell (R):** i.e. Thermarest Ridge Rest SoLite



Upper Body Clothing

- Lightweight T-shirt:** This can be made from cotton.
- Synthetic Long Underwear Top:** This should be lightweight, long-sleeved, and lighter colored. i.e. Patagonia Capilene Lightweight Top
- Insulating Layers:** This should be warm, breathable, and packable. i.e. Patagonia Nano Air Hoody
- Soft Shell Jacket:** Soft shell jackets are much more breathable than any hard shell and are therefore more comfortable to climb uphill in. Look for relatively lightweight (~16 oz) jacket that you can layer under for warmth when it is cold out but you can also use for wind protection when it is relatively warm. i.e. Patagonia Levitation Hoody
- Hard Shell Jacket:** We will always bring a hardshell jacket in case of bad weather. This tends to be something that sits in your pack unused if the weather is decent, but it is critical when the weather turns bad. As such the two main criteria to consider for this layer are weight (ideally ~ 12 oz) & waterproofness (i.e. Gore tex fabric is key). i.e. Patagonia Triolet or Pluma Jacket
- Insulating Parka with hood:** This can be down or synthetic, needs a hood, and should fit over all of your other layers. i.e. Patagonia Down Sweater Hoody

Lower Body Clothing

- Synthetic Underwear:** i.e. Patagonia Capilene Lightweight Performance line of underwear
- Synthetic Long Underwear bottoms:** i.e. Patagonia Capilene Midweight Bottoms.
- Soft Shell Pants:** Like soft shell jackets, soft shell pants are a key piece of climbing gear and will be the main item you will wear either with or without long underwear and/or hard shells. i.e. Patagonia Simul Alpine Pants (3 season)
- Hard Shell Pants:** It is also critical to bring a light, packable pair of hard shell pants with full length side zips. i.e. Patagonia Cloud Ridge Pants.
- Shorts (O)**

Head, Hands, and Feet

- Warm Hat or Balaclava:** It is important this is a wool or synthetic blend and not made of cotton. i.e. Patagonia Beanie Hat
- Neck Gaiter or Buff:** This can be good for protecting your face in a cold wind. The Buff is a lightweight neck gaiter than has innumerable uses including doubling as an ear band. We do have NMS buffs available for purchase.
- Sun Hat:** i.e. Patagonia Surf Brim sun hat
- Sun Glasses:** We recommend a dark lens and side shields for the best eye protection. i.e. Julbo Shield with the Spectron 4 lens. Keep in mind, most manufacturers' "dark" lenses transfer roughly 10% of available light.
- Ski Goggles:** We recommend choosing a versatile lens that will not burn your eyes in high light nor become a safety hazard in low light. i.e. Julbo Atlas with a Spectron 3 lens
- Mid weight glove:** i.e. Black Diamond Arc or Impulse Glove
- Heavy Weight Gloves:** i.e. Black Diamond Legend Glove.
- Chemical Hand warmers:** These are optional, but recommended for people whose hands get cold easily.
- Custom Foot Beds:** Custom footbeds will improve your overall experience. At the very least we recommend replacing your stock insoles with Superfeet.
- Socks (2-3 pairs):** These should be a wool or synthetic blend; no cotton. We usually bring 1 extra pair of socks so we can alternate from day to day.. i.e. Patagonia Merino Performance Socks
- Boots (R):** This must be a crampon compatible, leather or plastic, mountaineering boot. You should also consider your future climbing objectives when deciding which boot to purchase as leather/synthetic mountaineering boots have a relatively limited range of temperatures/conditions that they perform well in. i.e. La Sportiva Trango S Evo GTX (this is the lightest boot you could get away with for this course) or Trango Extreme Evo Light, or Nepal (this is a warmer boot that could crossover to other peaks like Rainier).
- Rock Shoes (O):** If you have a leather/synthetic mountaineering boot (i.e. the Sportiva models listed above) then you will not need rock shoes for the course. If you are planning to use a plastic double boot then you should bring rock shoes with you. i.e. La Sportiva TC Pro



- Gaiters:** Be sure these fit over your boots. i.e. Black Diamond Cirque Gaiters

Other Items

- Headlamp w/ double set of batteries (R):** i.e. Petzl Myo or Tikka XP
- 2 x 1 Liter Wide Mouth Water Bottles (P):** We know some people like hydration bags but keep in mind these are difficult to manage in cold temps, and are much more likely to leak and soak everything in your pack. It is also hard to ration your water throughout the day. If you would like to use something like this be sure it is a durable, non-plastic, bag (i.e. MSR Dromlite bag w/ hydration system) i.e. Nalgene Wide Mouthed 1 L Bottles
- Personal Lunch Food:** Bring a variety of types of food and aim for ~1,600 calories/day (an ounce of food often equates to about 100 calories so 1 lb of food is about equal to 1,600 calories).
- Mountain Dinners and Breakfasts:** If you are registered for a custom climb and did not add the meal package on then you will need 1 less of each meal than the number of days of the trip. i.e. for a 6-day trip you need 5 dinners and 5 breakfasts. These should be meals that you just need hot water to prepare. If you are registered for a set date climb, or added the meals package to a custom climb, then the dinners, breakfasts and hot drinks will be provided by NMS.
- Small Folding Knife (O)**
- Cup, Bowl, Spoon**
- Small Sunscreen Tubes:** 2 x 1 oz tubes with high SPF factor (30 or higher)
- Lip Balm with sunscreen:** SPF 15 or higher
- Altimeter Watch or Standard Watch with Alarm (O)**
- Small Camera (O)**
- Spare Batteries for Camera, Headlamp, etc.** – You should have a new set of batteries in your headlamp as well as these spares.
- Ear Plugs** – These can be nice for shared sleeping spaces.
- Toiletries:** Small tube of toothpaste, toothbrush, TP, & 1-2 baby wipes/day. Keep this light!
- First aid kit w/ personal meds:** Guide will have large group kit.
- Blister kit:** This should be very small i.e. duct tape, Compeed pads (these are AMAZING for blister prevention/relief and worth their weight in gold, far superior to moleskin), & band-aids.
- Lighter (O)**
- 2 Heavy Plastic Garbage Bags**
- iPod, Kindle or similar:** optional but nice
- Water Purification:** i.e. Aqua Mira (https://www.amazon.com/Aquamira-Water-Treatment-Drops-1oz/dp/B000OR111G/ref=sr_1_1?ie=UTF8&qid=1476723310&sr=8-1&keywords=aqua+mira)

Additional items that may be required for early season climbs. (Please check with the office to see if you will need these items for your trip.)

- Avalanche Beacon (457 MHz) (R):** Start with new batteries and always carry a spare set. These should be Duracell Alkaline batteries. DO NOT bring Lithium Ion, off brand or rechargeable batteries for your beacon. i.e. Pieps DSP Sport
- Shovel (R):** This should be a metal shovel i.e. Black Diamond Transfer 3 Shovel
- Avalanche Probe (R):** This should be a sturdy probe i.e. Black Diamond Quick Draw Tour Probe 320
- Snowshoes (R):** Depending on the time of year and the current snowpack conditions you may require the additional flotation provided by snowshoes.

Recommended Gear Shops

Ascent Outdoors: A great gear shop in Seattle. Ascent Outdoors sells new and used gear.
www.ascentoutdoors.com

Feathered Friends: Another great Seattle shop. www.featheredfriends.com

