



North Cascades Ski & Snowboard Mountaineering Course Equipment List

The weather in the North Cascades can be volatile. Clothing systems need to be capable of meeting the demands of an ever-changing environment. A layering system, which allows articles of clothing to be added or subtracted as the weather changes, has proven most versatile. The clothing items listed below will work together to provide appropriate insulation in the most demanding conditions. Because it can snow, or rain, materials used in clothing should keep you warm even if they are wet. Synthetics such as polypropylene, Capilene, Synchronia, fleece, and pile are best, wool will also work. Cotton, with the exception of a t-shirt for the sun, is unacceptable. Please test out your gear before you arrive in Seattle.

Upper Body Layers

Upper body layers are some of the most important components of a good layering system. They should be comfortable, lightweight and breathable. Cotton is unacceptable, except for a sun shirt while hiking on warm days.

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Base Layers	2		One silk weight and one heavy weight top made of synthetic material that can be layered together to increase warmth. A light-colored silk weight (white/tan/light blue/etc...) is a good idea, because it will decrease the amount of solar radiation (warmth) that your shirt absorbs. Conversely, your mid-weight base layers should be darker so that they do absorb the sun's warmth.	-
Tee Shirt	1		To be worn as a sun shirt while hiking at lower elevations. Synthetic fabric is the way to go, and can double as a bandana or extra sun protection under a baseball cap.	-
Medium Weight Top	1		To be worn over the base layers and should be synthetic or wool. (a soft shell is an acceptable substitute)	-
Heavy Weight Top	1		Could be a heavy fleece or a windproof synthetic jacket, either way it should be synthetic and fit over most of your layers.	-
Synthetic Down Parka	1		In a maritime climate in the mountains, a burly synthetic parka will be your best friend on those cold wet nights or windy summit mornings. It should easily fit over all layers. A down jacket with a water proof finish is acceptable, but if it gets wet you won't be happy... or warm. Most of our guides use the Patagonia 'DAS Parka' . However if you plan on using this coat in arid areas of extreme cold (e.g. high altitude) a down parka may be more appropriate. Please don't hesitate to call us before making any major purchases. 1.800.985.4957	-
Outer Wear	1		A jacket made of waterproof / breathable material such as Gore-Tex is vital for keeping you warm and dry. It needs to fit over all layers.	-





Lower Body Layers

Lower body layers should be versatile and easy to change into and out of under changing weather conditions.

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Base Layers	2		One silk weight and one heavy weight bottom layer made of synthetic material that can be worn together to increase warmth.	-
Fleece or Synthetic Pants	1		These should be either fleece or synthetic down. If the pants have side zips, it will make your life a lot easier by allowing you to layer without removing your foot wear. We recommend the Patagonia 'micro-puff pants'	-
Shorts	1		These are optional, but are nice to wear at lower elevations. Cotton is unacceptable; synthetic will dry faster and be more comfortable for long periods of wear.	-
Outer Wear	1		Pants made of waterproof / breathable material such as Gore-Tex are vital for keeping you warm and dry. They need to fit over all layers and should have side zips.	-

Head, Neck, Hands & Feet

Keeping your extremities warm & dry is crucial. We lose a massive percentage of body heat through our heads, and our hands and feet are the most susceptible to inconveniences like frostbite and trench-foot. Developing a system that works for your specific needs takes time; this guide is a good place to start.

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Warm Hat	2		Should be made of synthetic material or wool, cotton is unacceptable and dangerous.	-
Sun Hat	1		The sun can be very bright (especially with reflection), the more protection your cap offers from the sun, the better.	-
Balaclava or Neoprene Face Mask	1		Used to protect the face from wind/snow, and can be a real life-saver under stormy conditions.	-
Goggles	1		Double lens models with vents work best.	-
Sunglasses	2		Dark lenses with good side protection are a must. The sun can be very bright (especially with reflection off of the water/snow/ice) and can cause permanent eye damage. Most of our guides wear Costa Del Mar sunglasses	-
Light Weight Gloves	1		Windstopper fleece works best. Work gloves with a water proof palm are nice to have along when dexterity is more important than warmth. 'Dura-Therm' or like models (synthetic glove with rubber palm & fingers) work well, just ensure you find the warmest model available.	-
Heavy Weight Gloves/Mitts	1		Removable shell is a must. These should be warm, water-proof and breathable, with removable liners for easy drying.	-
Socks	3-4		These should be synthetic or wool. Having a mix of light and heavy weight socks is nice to adjust to variable weather.	-
Ski/Snowboard Boots	1		Most of our time will be spent in these boots over the course of the	-





			trip. Make sure they are comfortable. For ski gear, we recommend a vibram sole boot with a randonee or telemark binding set-up.	
Gaiters	1		These should fit over your ski boots, and are used to keep water/snow/rocks out. They should be tall and water/abrasion resistant.	-

Technical Hardware

For technical gear we recommend [Black Diamond](#). We run their equipment on every mountain trip we operate, and find it to be among the best in the industry. For tents, sleeping bags, and duffels; we recommend [Kelty](#).

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Skis / Snowboard	1		We recommend mid-fat to fat width skis (75mm – 90mm underfoot), and split-boards for snow boarders. For snowboarders we do have snowshoes for rent.	-
Climbing Skins	1		These should fit properly to your skis/board.	
Avalanche Transceiver	1		Transceivers must use the 457 kHz frequency. Equipment rental is available	YES
Backpack	1		Should have a capacity of at least 5,000 cc, and should be comfortable with 40-60 lbs of weight. The Kelty ' Soar 5200 ' is a lightweight solution in a high-capacity package.	YES
Ski poles	1		Lightweight and adjustable length work best.	YES
Lightweight Harness	1		Should fit over all layers and be comfortable when wearing a pack. Adjustable leg loops are best.	Provided
Crampons	1		Light weight, sturdy, and easily adjustable are best. The Black Diamond ' saber-tooth ' works well.	Provided
Locking Carabineers	1		Standard aluminum locking carabineers are used on your harness for glacier travel and technical climbing.	Provided
Helmet	1		Should be light weight and rated for rock climbing/ mountaineering.	Provided
Large Duffel	1		Used for transporting gear in planes and vehicles on route to trip local. Kelty duffel bags are burly and handle large loads with ease.	-

Sleeping Bag & Pads

Having a good sleep system is essential in the mountains. While down bags are very warm and pack incredibly small, they lose all insulating properties when they get wet. In a maritime climate like the North Cascades a synthetic fill sleeping bag is a must.

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Sleeping bag	1		We recommend a synthetic fill bag with a comfort rating of -15 degrees Fahrenheit. However, on bigger mountains and in early season a down bag is more appropriate. Kelty bags work well. Please don't hesitate to call us before making any major purchases. 1.800.985.4957	YES
Sleeping pads	2		A system of one compact inflatable pad ('Thermarest) and one closed cell foam pad works best to insulate when sleeping on snow.	YES

Miscellaneous

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
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Eating Utensils	-		Bowl & Spoon (Lexan or titanium work well), as well as a 14oz mug with a lid for hot drinks.	-
Headlamp	1		We recommend LED headlamps, because they are lightweight, long-lasting & durable. Bring extra batteries.	-
Toilet Paper	1		Bring your own in a Ziploc bag.	-
Iodine	1		A bottle of 'Polar-Pure' Crystals is the most convenient, but 'Potable Agua' works well also.	-
Personal Med-Kit	1		A personal prescription of a broad-spectrum antibiotic like Ciprofloxacin or Erithromycin is REQUIRED . Your kit should also include ALL personal medications, as well as a stash of Ibuprofen, Aspirin, Band-Aids, and Neosporin. A group Med-Kit will be available for everyone, however bringing a personal kit is mandatory. If you have any questions please don't hesitate to call us at 1.800.985.4957	-
Blister Kit	1		This should include mole skin/foam and cloth athletic tape for personal use.	-
Water Bottles	2		Wide mouth 1-liter Lexan bottles ('Nalgene') work best.	-
Bandana	1		Used for extra sun-protection. Your t-shirt can be used in place of a bandana if you are trying to shave weight (which is a good thing).	-
Stuff Sacks	2-4		For organizing your gear inside of your backpack.	-
Garbage & Ziploc bags	variety		To keep your gear dry inside of your pack. (e.g.. line your stuff sack with a garbage bag before you stuff your sleeping bag in there)	-

Optional

Equipment	Quantity	<input checked="" type="checkbox"/>	Comments	Rental
Summit Pack	-		Used on day excursions, should be between 35L - 55L (many people use their big pack for this purpose).	-
Hand Warmers	4		A good thing to keep in your pack for those brisk alpine starts.	-
Sleeping Bag Liner	1		For increased warmth.	-
Pee Bottle	1		1-liter wide-mouth Lexan with a SECURE LID . Nice to have when there is really inclement weather outside.	-
Energy/Candy Bars	0-20		Bring bars that taste good!	-
Moist Towelettes	0-20		This will be as close to a shower as you will get, we recommend one wipe per day.	-
Book	1-2		Leave the 15 pound hardcover at home.	-
Journal	1		'Rite in the Rain' or similar water resistant paper work best.	-
Camera	2-4		Digital or Film. If you are buying a digital camera, one with a view finder will allow you to take photos when it is too bright to see the screen and helps save batteries. A camera that is compatible with AA's allows you to bring extra batteries that don't cost an arm and a leg. Bring an extra memory card.	-



Additional Information



We use gear from these select companies on every trip we run! Their gear has proven itself again and again on the highest mountains, roughest water, and steepest ice. We endorse these companies because they make gear that is functional and reliable.



We provide the following: tents, group climbing equipment, expedition first aid kits, cooking equipment, and trip food.

Please don't hesitate to call us with any questions 1.800.985.4957

