

Equipment List

Denali Mountaineering

Welcome to NOLS! We look forward to having you with us this summer in Alaska.

This list will help you decide what to bring with you to Alaska. The NOLS Alaska outfitting department can provide you with all the equipment on this list other than those items designated “must bring” or “bring if you want.” **We recommend that you only bring gear that you already own. The actual gear needed for your course may vary slightly, depending on instructor judgment, course location, season and recent weather.**

Here are three options to help guide your gear purchasing process:

- 1) Purchase or rent from us. We have a full retail store with experienced staff that can outfit you completely, tailoring your options according to route, weather and time of year. You will get only the equipment you need with no extra purchases.
- 2) Already have items? Bring them along! Your instructors will inspect your gear and determine if it is suitable for your course. If an item is not approved, you can leave it with your luggage in our storage lockers.
- 3) Want to shop before your course begins? Visit our list of preferred retailers at <http://www.nols.edu/about/partnerships/retailers/>

We recommend renting gear from NOLS rather than purchasing expensive gear specifically for your course. While you do not have to rent gear from us, there are several reasons why we suggest it. Our rental gear is high quality, chosen and maintained specifically for the use it receives on our courses. The rental prices are reasonable given the wear the equipment receives. Also, if you plan to eventually purchase gear, you will have a better understanding of your future needs and preferences after the course. Finally, even if your equipment is appropriate, it will receive lots of hard use. Students are often surprised at the amount of wear put on their personal gear during a course. If you still wish to buy gear before your course, please read our equipment descriptions carefully and contact us if you have any questions. NOLS Alaska strives to find appropriate lightweight gear for our courses. You should strongly consider weight when purchasing gear for your course. Every ounce counts toward the total weight of your pack. This equipment list is designed to give you information on the items you’ll need for your expedition, as well as the functions your gear will serve. Please see also the boot fitting instructions in your enrollment packet.

In addition to your course tuition, you have been billed an equipment deposit, which will be applied to the charges you incur for rental, cleaning, purchase of personal items and any loss or damage to our gear. Total charges will vary depending upon the amount of equipment that you rent or purchase from us. Please note that rental prices in the table below cover the entire course. Please use the worksheet provided on the final page of this list to estimate your equipment charges. Please note that **ALL PRICES ARE SUBJECT TO CHANGE.**

If you have any questions, or if you would like more information regarding any of the items in the equipment list, please contact our staff in Palmer at 907-745-4047; or email alaska@nols.edu; or visit our web site at <http://www.nols.edu>

The availability of each item is indicated as follows:

Rental –the item can be **rented** from NOLS.

Purchase Only – the item can be **purchased** from NOLS.

Must Bring – the item is **not available** from NOLS, but is required.

Bring If You Want – the item is **not available** from NOLS and is optional for your course.



Upper Body Clothing

You need at least **four (4) insulating layers**, a wind-proof layer and a rain layer. Make sure your layers fit comfortably over each other. One layer must be a fleece or insulated jacket such as a Mountain Hardwear Compressor jacket and one must be a 6000 meter, or warmer, down parka.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Base Layer (Long Underwear Top)	Purchase Only	\$25-\$75	1	Mid- or expedition-weight synthetic or performance wool is best. Mid-weight only constitutes half a layer while expedition-weight counts as a whole layer. (Examples: Mountain Hardwear Extend, Patagonia Capilene, or IO-Bio wool)	
Fleece or Insulated Vest	Bring If You Want	Bring If You Want	1	You may want a vest to supplement the upper layers. Insulation should be some type of polyester such as Light Loft, Polarguard 3D, and Thinsulate.	
Fleece Jacket	Purchase Only	\$50	1	Mid or heavy weight fleece jacket, such as the Mountain Hardwear Microchill, that fits over your other layers. Wind stopper or other tech fleeces are fine, but not necessary.	
Insulated Jacket	\$25	\$110-\$200	1	An insulated jacket, such as the Mountain Hardwear Compressor or the Patagonia Puffball, is a good third layer. This jacket should fit over your base layers.	
Insulated Parka	\$30	\$110-\$300	1	A down or synthetic-filled parka with a hood . Should fit comfortably over all upper body layers. We rent the Sub Zero Parka by Mountain Hardwear.	
Synthetic T-shirt	Purchase Only	\$35-\$45	1	To wear on warm days. We strongly recommend lightweight polyester, polypro, or Coolmax top because it will dry much more quickly than a cotton T-shirt. We have these for sale with the NOLS AK logo.	
Wind Shirt	\$18	\$50-\$150	1	Nylon wind shell, roomy enough to fit comfortably over your base layers and fleece or insulated jacket. Gore-Tex is acceptable but this layer does not have to be waterproof. Your rain layer can double as a wind shirt.	
Rain Parka	\$25	\$99- \$200	1	Your rain parka should be roomy enough to fit comfortably over all upper-body layers. Coated nylon or waterproof/breathable parkas are acceptable. Ponchos are not acceptable.	



Lower Body Clothing

You will need **two lower-body insulating layers** that should fit comfortably over each other and underneath your wind or rain pants. These should be a medium weight base layer (long underwear) bottoms plus either expedition weight bottoms, or fleece pants.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Base Layer (Long Underwear) Bottoms	Purchase Only	\$25- \$50	1 pair	These must be mid-weight polyester or performance wool. (Examples: Mountain Hardwear Extend, Patagonia Capilene, and IO-Bio Wool). Cotton and Duofold are unacceptable.	
Snow/Rain Pants	\$20	\$50-\$100	1 pair	We rent Gore-Tex Pro Shell rain pants.	
Wind Pants	\$18	\$55-\$100	1 pair	Nylon shell pants. These should fit comfortably over all lower-body layers. Side-zippers allow the pants to be put on over boots. Waterproof breathable fabrics such as Gore-Tex are acceptable and can double as wind pants.	
Insulated Pants	\$18	\$120	1 pair	Down or synthetic-filled pants that fit over your long underwear layers. We rent Mountain Hardwear Chugach pants.	

Miscellaneous Clothing

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sun Hat or Baseball Cap	Purchase Only	\$18-\$25	1	Should be wide-brimmed to protect from sun.	
Fleece or Wool Hat	\$6	\$30	1	Any fleece hat that will fully cover your ears. A wool ski hat is fine.	
Glove Liners	Purchase Only	\$5-\$12	1 Pair	Lightweight polypropylene gloves may be layered with heavier gloves for warmth or worn alone for sun protection.	
Fleece or Wool Gloves	Purchase Only	\$15-\$25	1 pair	Fleece and Ragg wool are adequate. Heavy polypropylene gloves are also acceptable.	
Insulated Overmitts	\$10	\$35-\$80	1 pair	Must fit comfortably over a pair of mittens. A modular glove or mitten system may work for this. OR Alti or Black Diamond Mercury is recommended.	
Mitten Shells	\$10	\$40	1 pair	Nylon shells to cover your mittens and/or gloves. Gore-Tex is acceptable. Modular glove and mitten systems work well and will substitute as your mitten shells and one hand layer.	
Underwear/Bra	Purchase Only	\$25-\$35	2-3 Pairs of Underwear; 1 Bra	Undergarments made from supplex/lycra or polypropylene wick moisture away from your skin and are highly recommended.	



Miscellaneous Clothing (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Balaclava or Fleece Hood	\$6	\$15-\$25	1	This style hat offers almost total head protection and insulation. In addition to the heavier head layer a lightweight Capilene or silk balaclava can be used.	
Neck warmer	\$6	\$8-\$15	1	Fleece neck warmers are warm and very comfortable.	

Footwear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Plastic Boots	\$80	\$220-\$330	1 pair	We do not recommend purchasing boots before your course. If you already own plastic mountaineering boots or can easily borrow them, please bring them. We stock Koflach Degree and Scarpa Inverno plastic boots in sizes 5 to 16. If you wear a larger size please let us know immediately.	
Hiking Socks	Purchase Only	\$9- \$15	3-4 pairs	Must be 75 to 100% wool, merino wool, heavy rag type, or thick polypropylene. No wool/cotton blends.	
Overboots	\$24	\$125	1 pair	These are a must. If you own a pair please bring them. Must accommodate step- in crampons.	
Camp Shoes	Purchase Only	\$32	1 pair	Optional. Lightweight, waterproof shoes. We carry Holeys Coastal Boot. Crocs with no vent holes, like the Specialist, are a good option.	
Insulated Booties	\$8	\$25-\$50	1 pair	We use a double layer heavy weight fleece. Must be made with some type of polyester or down insulation. Should not have a hard sole so, they can fit inside your boot shell.	
Gaiters	Purchase Only	\$40 - \$60	1 pair	We sell Outdoor Research Verglas gaiters. Any gaiters with a double closure (both zippers and snaps) or 2" Velcro are also suitable. Black Diamond is another good brand.	

Sleeping Gear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sleeping Bag	\$60	\$610	1	We rent 800- fill down bags with Gore Dryloft shells rated to -25 degrees. Synthetic- filled bags are acceptable. Your bag must have a temperature rating of at least -20 degrees.	
Sleeping Pad	\$5	\$45-\$100	1+1	Provides padding and insulation between sleeping bag and ground. We rent closed-cell foam pads, however we recommend and sell self-inflating sleeping pads. Therma-A-Rest is a great brand. In the past, instructors have recommend one of each.	
Sleeping Bag Compression Stuff Sack	\$8	\$28-\$35	1	For easier packing of your sleeping bag into your backpack. On this course you'll use a compression stuff sack lined with a plastic trash compactor bag. Good brands are Outdoor Research and Granite Gear.	

Packs & Bags					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Internal Frame Pack	\$80	\$300-500	1	Internal frame backpack with a volume of 6000-7000 cubic inches (90-110 Liters). If you bring a pack, your instructor will determine if it is suitable for your course. We rent Deuter and Osprey packs. Other good brands are Arc'teryx, Lowe and Gregory.	
Small Stuff Sacks	\$1-\$4	\$3-\$10	1-2	Used to organize items in your pack.	
Waterproof Bag Liners	Purchase Only	\$0.50	2-3	Durable, sturdy, plastic trash compactor bags. These can be found in most grocery stores.	

Miscellaneous Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Bandana	Purchase Only	\$2	1-2	For multiple uses.	
Lighter	Purchase Only	\$1	1-2	Used to light stoves. Do not bring a zippo.	
Eating Gear	Purchase Only	\$5-\$10	1 Bowl 1 Spoon	Tupperware type bowl, 1-2 pints, with a lid. Lexan/plastic spoon.	
Eyeglass Retainer	Purchase Only	\$5	1	Good brands are Chums and Croakies.	
Insect Repellent	Purchase Only	\$6	1	A small bottle.	
Lip Balm	Purchase Only	\$2.50	1	Stick or cream with sun protection.	
Mosquito Headnet	\$4	\$12	1	You can rent this if bugs will be a problem on your course.	



Miscellaneous Items (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Notebook and Pen/Pencil	Purchase Only	\$3-\$10	1 of each	A small spiral notebook is fine. Avoid hardcover. We sell a durable notebook with waterproof pages.	
Prescription Glasses and Contact Lenses	Must Bring	Must Bring	NA	If you wear prescription glasses or lenses, you should bring a spare set.	
Sport Sunscreen	Purchase Only	\$5-\$7	1 tube or bottle	A tube or bottle of 2-3 oz. should be plenty. A sun protection factor of 30 or greater is necessary. A physical sun block such as zinc oxide is strongly recommended for people who burn easily.	
Sunglasses	Purchase Only	\$50-\$60	1 pair	Durable with 100% UV protection. Glacier glasses with side shields work great. A hard case is recommended. If you wear prescription lenses, bring your own prescription sunglasses or look for a quality pair of clip-on shades. We sell Optic Nerve. Other good brands are Julbo, Native.	
Goggles	Purchase Only	\$50-\$150	1 Pair	Protection from wind, sun, and cold. 100% UV protection.	
Toilet Articles	Must Bring	Must Bring	NA	Toothbrush, toothpaste, comb/ brush, moisturizer, prescription meds, tampons. Sample sizes of 2oz. are preferable. No deodorant or excessive items.	
Watch	Must Bring	Must Bring	1	Please bring a waterproof watch with an alarm even if you do not normally wear one.	
Water Bottle or Water Bladder	Purchase Only	\$8-\$20	1-2	Wide-mouth quart- or liter-size. A lightweight bladder system also works well.	

Climbing Gear

PLEASE DO NOT PURCHASE ANY OF THESE ITEMS FOR YOUR COURSE. We have found that it works best if everyone uses NOLS-issued climbing gear. If you have your own already, bring it to Alaska and your instructors will examine it to see if it is suitable for use on the course.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Snowshoes	\$20	\$150	1 pair	We stock MSR snowshoes.	
Ice Axe	\$12	\$70-\$100	1	60 to 70 cm mountaineering ice axe suitable for steep snow and ice climbing.	
Cordalette	Purchase Only	\$8	20 ft	This 6 mm cord is needed for your glacier rig.	
Crampons	\$12	\$60-\$140	1 pair	10- or 12-point crampons with horizontal front points. NOLS uses Petzl Vasak Leverlock crampons. Either strap-on or step-in types are fine. Grivel, Black Diamond, Lowe and Chalet Moser are other good brands.	



Climbing Gear (Continued)

Climbing Harness	\$10	\$35-\$100	1	A sit harness. If you have a high-quality harness with adjustable leg loops, which you think might be appropriate, bring it along. Your instructors will examine it and decide whether it is adequate.
Helmets	No Charge	NA	1	We do not allow the use of personal helmets on our courses. We will provide helmets at no extra cost.

Optional Items

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Camera	Bring If You Want	Bring If You Want	1	Digital cameras are great! See camera notes below for some things to consider.	
Book	Bring If You Want	Bring If You Want	1	A small book for pleasure reading.	
Vitamins	Bring if You Want	Bring if You Want	NA	Some folks prefer to supplement their diet with a multi-vitamin.	
Knife	Bring if You Want	Bring if You Want	1	A small pocketknife or multi-tool.	
Headlamp or Flashlight	Bring if You Want	Bring if You Want	1	Good idea for August courses, unnecessary for June or July. Should be lightweight.	
Trekking Poles	\$10	\$50-\$100	1-2	Single or double telescoping poles are best. We sell adjustable trekking poles and rent heavy-duty ski poles. Walking sticks or lightweight track skiing poles are not acceptable.	
Neoprene Face Shield	Bring If You Want	Bring If You Want	1	Fits over your face to reduce skin exposure to sun, wind, and cold.	
Neoprene Nose Guard	Purchase Only	\$5-\$10	1	Fit over your glacier glasses frame to reduce sunburn. Highly recommended!	
Compass	Bring if You Want	Bring if You Want	1	We issue one compass per tent group. However, if students bring their own more map reading practice is possible for everyone.	

Shared Group Equipment—NOLS will supply

Expedition members share both the use of and the responsibility for the group gear that NOLS issues. NOLS charges only for group equipment lost or damaged. Keep in mind that NOLS evaluates gear from a number of perspectives beyond those that an individual user might consider. Performance, durability and simplicity are all contributing factors towards our gear selection.

Tents	Compass	Trowel or Shovel
Stoves (MSR)	Maps	Fishing Gear
Fuel Bottles & Fuel	GPS	Repair Kits
Cooking Gear/Spice Kits	Avalanche Transceivers	Soap and Hand Sanitizer
Carabiners/Slings	Climbing Ropes	Climbing Hardware
Snow Shovels	Avalanche Probes	Snow Saws

First Aid: Our instructors carry adequate first aid kits. There is no need to bring you own.



Camera Notes

Here are a few features to consider if buying a digital camera for your trip:

1. **Durability.** The fewer movable parts the better. Waterproof, or at least water resistant, is important.
2. **Size.** Small and light is great, but make sure the buttons are easy to push with gloves or cold fingers,
3. **Power.** Lithium AA batteries are great: they last about 5 times longer than regular AA batteries. If your camera uses rechargeable Lithium Ion batteries, make sure to bring 1-2 fully charged spare batteries. Save power by minimizing use of the LCD display.
4. **Memory cards** have really come down in price, so bring plenty. Just remember it is a lot of work sorting through lots of bad pictures. A trick of professional photographers is to only show their best pictures, and throw away the bad.
5. **Optical zoom** gives better quality than digital zoom.
6. **Megapixels.** Quality of the pixels and optics make a big difference. 4-6 megapixel is plenty for most purposes.

Equipment Charges Worksheet

An equipment deposit is required of each student to cover the average cost of equipment rental and cleaning. You will be charged additionally for the replacement of any lost or damaged group equipment. Your actual expense will vary according to how much gear you rent and purchase from NOLS. Additional purchases of new and used gear may raise your total outfitting expense above your rental deposit. Rental and purchase charges will be totaled at the end of your course. Those of you using your own equipment may be eligible for a refund, which will be sent to you by mail.

TO ESTIMATE YOUR EQUIPMENT FEES FOR YOUR NOLS COURSE

- | | |
|--|------------|
| 1. Total equipment rental charges from NOLS:
(Rental charges are for the entire course) | _____ \$ |
| 2. Total equipment purchases from NOLS:
(Estimated from checklist) | + _____ \$ |
| 3. Add lines 1 and 2:
(This is your estimated total with rentals and purchases) | _____ \$ |
| 4. Equipment deposit you have on credit:
(Depends on your course type) | - _____ \$ |
| 5. Subtract line 4 from line 3:
(This is your final estimated balance) | _____ \$ |

