



DENALI MOUNTAINEERING EQUIPMENT LIST

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 and recent weather.**

On the first day of your course, you will meet with one of your instructors and inspect each item you have brought. If the item meets our standards and is suitable for the course’s curriculum goals, season and prevailing weather conditions, you can use it on your course. If an item is not approved, you may leave it with your baggage at our base in Palmer.

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 provides 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.

Please note that rental prices cover the entire course. The equipment rental and purchase prices will allow you to estimate your charges. Your rental bill will be calculated at the end of the course. You can either pay NOLS Alaska with check, cash, traveler’s check, or MC/Visa, or NOLS can mail a final bill to your home address. 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 alaska@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 is best. Mid-weight only constitutes half a layer while expedition-weight counts as a whole layer. (Examples: Mountain Hardwear Extend, Patagonia Capilene.)	
Thin Fleece or Heavy Long Underwear	Purchase Only	\$45-\$100	1	This can be any secondary fleece layer of 100- to 200-weight. An expedition-weight long underwear top may be substituted.	
Fleece or Insulated Vest	\$14	\$45-\$150	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. We rent fleece vests as an extra layer.	
Fleece or Insulated Jacket	\$19	\$110-200	1	An insulated jacket such as the Mountain Hardwear Compressor or a 300-weight fleece jacket that fits over your other layers.	
Insulated Parka	\$23	\$110-\$300	1	A down or synthetic-filled parka with a hood . Should fit comfortably over all upper body layers. If you bring a down parka it must have a Gore-Tex shell. We rent the Sub Zero Parka by Mountain Hardwear.	
Synthetic T-shirt	Purchase Only	\$30-\$35	1	Optional, to wear on warm days. We have these for sale with the NOLS AK logo. <i>Cotton is not acceptable.</i>	
Wind Shirt	\$14	\$50-\$150	1	Optional. Nylon wind shell, preferably with a hood (not waterproof) and roomy enough to fit comfortably over all upper body layers except your parka. Gore-tex is acceptable.	
Rain Parka	\$19	\$99- \$200	1	We rent three-layer Gore XCR parkas as a rain parka with a hood. It should be roomy enough to fit comfortably over all upper-body layers except your parka. Coated nylon or waterproof/ breathable parkas are acceptable. <i>Ponchos are NOT acceptable.</i>	



Lower Body Clothing

You will need two lower-body insulating layers that should fit comfortably over each other and underneath your rain pants. These should be a medium weight base layer (long underwear) bottoms and either an expedition weight polypro bottom or fleece pants as well as insulated 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 (e.g. Capilene, Extend by Mountain Hardwear). Cotton and Duofold are unacceptable.	
Fleece Pants	\$14	\$65-\$100	1 pair	We rent Polarfleece pants with an ankle zip. Expedition weight long underwear bottoms are also acceptable.	
Snow/Rain Pants	\$15	\$50-\$150	1 pair	We rent Gore XCR rain pants. Gore-Tex pants may double as wind/rain pants.	
Insulated Pants	\$14	\$120	1 pair	Depending on instructor preference these may be required. Down or synthetic-filled pants that fit over your long underwear layers. If you bring down-filled pants they must have a Gore- Tex shell.	

Head, Neck & Hand Layers

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	\$5	\$20	1	Any fleece/wool hat that fully covers ears.	
Balaclava or Fleece Hood	\$5	\$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.	
Mosquito Headnet	\$3	\$12	1	You can rent this if bugs will be a problem on your course.	
Neckwarmer	\$5	\$8-15	1	Fleece versions are very warm and comfortable.	
Fleece or Wool Gloves	Purchase Only	\$15-\$25	1 pair	Fleece, Ragg wool, Dachstein, army surplus or heavy polypropylene are adequate. Gloves should fit under the mittens.	
Insulated Overmitts	\$8	\$35-\$80	1 pair	Must fit comfortably over a pair of mittens. A modular glove or mitten system may work.	
Mitten Shells	\$9	\$49	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	
Liner Gloves	Purchase Only	\$10-25	2 pair	Lightweight polypropylene or equivalent.	



Footwear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Plastic Boots	\$60	\$220-\$330	1 pair	We do not recommend purchasing boots before your course. If you already own plastic mountaineering boots or can borrow them, please bring them. We stock Asolo Evoluzione, Koflach Degree and Scarpa Inverno plastic boots in sizes 5 to 16. Two pairs of wool socks must fit comfortably inside. Do not bring a boot with a non-removable overboot.	
Socks	Purchase Only	\$9- \$15	4-6 pairs	Must be 75 to 100% wool, merino wool, heavy rag type, or thick polypropylene (no wool/cotton blends).	
Insulated Booties	\$6	\$25-\$50	1 pair	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 or Super-Gaiters	Purchase Only	\$40-\$60	1 pair	Must be knee-high and durable and fit over plastic boots. Regular gaiters work well for the climb. Supergaiters with a rubber rand are not necessary but can be substituted for regular gaiters. We sell Mountain Hardware gaiters. Any gaiters with a double closure (both zippers and snaps) or 2" Velcro are also suitable. Outdoor Research and Black Diamond are other good brands.	
Camp shoes	Purchase Only	\$32	1 pair	Optional. Crocs make nice camp shoes.	
Overboots	\$18	\$125	1 pair	These are a must. If you own a pair please bring them. Must accommodate step- in crampons.	

Sleeping Gear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sleeping Bag	\$45	\$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	\$4	\$75-\$100	1 or 2	Closed-cell foam, 3/8" thick. Used for padding and insulation between sleeping bag and ground. We rent closed-cell foam pads and sell self-inflating sleeping pads. We recommend using a self-inflating pad plus a half-length closed-cell foam pad.	
Sleeping Bag Compression Stuff Sack	\$6	\$28-\$35	1	A compression stuff sack lined with plastic trash compactor bags is used to keep your sleeping bag dry and easy to pack.	

Packs & Bags					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Expedition Backpack	\$60	\$300-500	1	We use Deuter and Osprey internal frame packs. Other proven brands include: Arc'teryx, Lowe, Dana Design, North Face and Gregory. If you bring a pack, it will be examined by your instructors to determine its suitability for your course and route. It must have a volume of at least 6,000 to 7,000 cubic inches.	
Small Stuff Sacks	\$1-4	\$3- \$10	1-2	Used to organize items in your pack.	
Lightweight Zip Duffle	\$4	\$15-\$20	1	Optional. Approx. 12" X 24" and/or "9 X 18." Used to keep clothing and gear organized.	
Waterproof Bag Liners	Purchase Only	\$.50	3	Plastic trash compactor bags are sturdy and work well. These can be found in any grocery store.	

Miscellaneous Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Bandana	Purchase Only	\$5.50	1-2	Optional. For multiple uses.	
Sun Glasses	Purchase Only	\$50-\$60	1 pair	Any good quality sunglasses with 100% UV protection will work fine. Glacier glasses with side shields work great. If you wear prescription lenses and have limited vision without them, bring your own prescription sunglasses. Lenses should be dark and block 100 percent Ultra Violet. Glass lenses will get scratched less than plastic. We sell Optic Nerve. Smith, Bolle, Oakley, Julbo, Native and Bausch & Lomb are other good brands. We highly recommend bringing a nose guard for your glacier glasses to reduce sunburn. A hard case is also recommended.	
Goggles	Purchase Only	\$50-\$150	1 Pair	Protection from wind, sun, and cold. 100% UV protection.	
Eating Gear	Purchase Only	\$5-\$10	NA	A Tupperware (1 to 2 pint) type bowl with a lid, lexan plastic spoon, and an insulated mug. Mug volumes of 12 oz. to 20 oz. are recommended with 20 oz mugs preferred by many.	
Water Bottle	Purchase Only	\$8-\$20	2	Wide-mouth quart- or liter-size.	
Lip Balm	Purchase Only	\$2.50	1	Stick or cream with sun protection.	



Miscellaneous Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Extreme Sunscreen	Purchase Only	\$5-\$7	1 tube or bottle	A tube or bottle of 8-10 oz. is plenty. A sun protection factor of 30 or greater is necessary. A physical sun block such as clown white or zinc oxide is strongly recommended for people who burn easily.	
Notebook and Pen/Pencil	Purchase Only	\$3-\$10	1 of each	A steno notebook is fine. Avoid heavy notebooks.	
Toilet Articles	Must Bring	Must Bring	NA	Toothbrush, toothpaste, comb or brush, skin lotion, prescription meds, tampons. For liquids, sample sizes of 2 oz. are preferable. Odorous items can be bear attractants and should be avoided. No deodorant or excessive toiletries.	
Watch	Must Bring	Must Bring	1	Please bring a waterproof watch with alarm even if you do not normally wear one.	
Prescription Glasses and Contact Lenses	Must Bring	Must Bring	NA	If you wear prescription glasses or lenses, you should bring a spare set.	
Disposable Lighter	Purchase Only	\$1	1-2	Used to light stoves.	

Climbing Gear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Snowshoes	\$15	\$150	1 pair	We stock MSR snowshoes.	
Ice Axe	\$9	\$70-\$100	1	60 to 70 cm mountaineering ice axe suitable for steep snow and ice climbing.	
Avalanche Transceiver	No Charge	\$299	1	We use BCA Trackers. If you own a transceiver, you may bring it. Your instructors will evaluate its suitability.	
Crampons	\$9	\$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 all make suitable models also.	
Climbing Harness	\$8	\$35-\$100	1	An alpine 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.	
Cordalette	Purchase Only	\$8	20 ft	This 7 mm cord is needed for your glacier rig.	

Optional Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Neoprene Nose Guard	Bring If You Want	Bring If You Want	1	Fit over your glacier glasses frame to reduce sunburn.	
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.	
Camera/Film	Bring If You Want	Bring If You Want	1	To capture your adventure! See Camera Notes below.	
Book	Bring If You Want	Bring If You Want	1	A small book for pleasure reading.	
Underwear	Purchase Only	\$10-\$36	2-3 pair	For men, polyester briefs or boxer shorts. We recommend women bring cotton underwear or silk or nylon underwear with a cotton crotch. Jogging bras made out of supplex/lycra or polypropylene wick moisture away from your skin and are highly recommended. Only 1 bra is needed.	
Vitamins	Bring if You Want	Bring if You Want	NA	A multi-vitamin supplement to the diet is preferred by some students.	
Hand Lotion	Bring if You Want	Bring if You Want	NA	Skin can become very chapped under mountaineering conditions. A small travel size is adequate.	

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 which an individual user might consider. Performance, durability, and simplicity are all contributing factors towards our gear selection. We will provide:

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|-------------------------|----------------------|----------------|----------|
| 1. Carabiners/Slings | 6. Stoves; white gas | 11. Snow Saw | 16. Maps |
| 2. Climbing Ropes | 7. Snow Shovels | 12. Repair Kit | |
| 3. Climbing Hardware | 8. Teaching Material | 13. Wax Kit | |
| 4. Tent | 9. Cooking Gear | 14. Radio | |
| 5. Fuel Bottles, Funnel | 10. Avalanche Probe | 15. Compass | |

FIRST AID:

Our instructors carry adequate first aid kits. There is no need to bring your 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. Many cameras use specialized (expensive) rechargeable Li-ion batteries. If your camera uses these, make sure to bring 1-2 fully charged spare batteries. Minimize use of the LCD display; it uses a lot of power.
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.** More isn't necessarily better. Quality of the pixels and optics make a big difference. 4-6 megapixel is plenty for most purposes. Go to a local store and ask if you can take the same picture with a couple of different cameras, and then compare them. Buy the one you like best from the store that helped you.

