

Equipment List
Pacific Northwest Outdoor Educator
Mountaineering- 24 Day
National Outdoor Leadership School

Welcome to NOLS!

We look forward to having you with us this summer in the Pacific Northwest.

This equipment list is designed to assist you in deciding what to bring. Please read this document carefully. The actual gear needed for your particular course may vary slightly, given course route, curriculum goals, season and prevailing weather conditions, and instructor preference. Try to avoid bringing anything that is not on this list.

We can provide you with all of the equipment on this list, other than those items designated as "Must Bring." We recommend that you only bring gear that you already own or that you can obtain inexpensively. On the first day you will meet with one of your instructors to review each item you bring from home. If your gear meets our standards, you can use it on your course. If not, you may store any excess gear at our headquarters.

While you do not have to rent or purchase gear from us, there are several reasons why we suggest it. Our rental gear is high quality and chosen specifically for the heavy 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 needs and preferences after your NOLS expedition. Finally, students are often surprised at the amount of wear put on their personal gear in a month.

The availability of each item is indicated as follows:

Purchase Only - Indicates that the item is available from NOLS, but for PURCHASE ONLY.

Must Bring - Indicates that the item is NOT AVAILABLE from NOLS.

Rental prices cover the entire course. Purchase prices listed are for new gear. ALL PRICES ARE SUBJECT TO CHANGE. The rental and purchase prices located in the gear checklist will allow you to estimate your charges; final charges will vary depending on the amount of equipment that you rent or purchase from us. You have been charged an equipment rental deposit in addition to tuition. This deposit will be applied to the charges you incur for equipment rental, cleaning, purchase, and any loss or damage to our gear. If your bill is less than the deposit fee, the difference will be refunded to you by mail.

If you have any questions, or if you would like more information regarding any of the items in the equipment list, please contact the NOLS Pacific Northwest outfitting staff at (360) 445-6657; E-mail: pnw_outfitting@nols.edu; or visit our web site at <http://www.nols.edu>. You can also write to us at NOLS PNW Outfitting, P.O. Box 527, Conway, WA 98238.



Upper Body Layers

NOLS uses a layering system where varying pieces of clothing are worn to achieve optimum body temperature control. The upper body layers listed are either synthetic garments which retain their insulating properties even when wet, or nylon or Gore-Tex® layers which help prevent heat loss by cutting wind, rain and snow. You will need 3 insulating layers, plus a wind and a rain layer. All must fit comfortably over each other so they can be worn at the same time. Your top insulating layers must be a fleece made of Polartec® 300 or an insulated jacket with a zipper.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
T-Shirt	Purchase Only	\$27	1	We recommend Capilene® or other synthetic since they dry fast. This is not one of your insulating layers. No cotton.	
Base Layer (Mid-weight synthetic)	Purchase Only	\$23-\$52	1	Lightweight or mid-weight crew or zip turtleneck top of polyester, Capilene, or Polartec Power Dry.	
Mid-Layer (Expedition Weight)	Purchase Only	\$48-\$68.50	1	Expedition-weight crew or zip turtleneck top of polyester fleece or Capilene.	
Top Insulating Layer (Fleece or Insulated Jacket)	\$20	\$65-\$110	1	A heavy weight, full-length zip fleece jacket of Polartec® 200 or 300 or insulating jacket that is lightweight, such as the Mountain Hardwear Chugach, Tempest jacket or Patagonia Puffball. Insulated jacket preferred.	
Wind Shirt	\$15	\$55	1	A lightweight, breathable, nylon wind shell either anorak or full-zip style. This must be large enough to fit comfortably over the 3 insulating layers.	
Rain Jacket	Purchase Only	\$60-\$150	1	A sturdy, roomy waterproof jacket with a hood. Must be large enough to fit over all the insulating layers. <u>Breathable fabric such as Gore-Tex and H2NO® are preferable and can work as both a wind and rain layer.</u>	



Lower Body Layers

You'll need underwear, two lower insulating layers plus a wind layer and a rain layer, which must fit comfortably over each other so they can all be worn at the same time.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Women: Underwear/ Sports Bras Men: Boxers	Purchase Only	\$18-\$36	2 pair	Women's briefs and sports bras and men's briefs or boxers in Capilene®, Coolmax or silk are recommended. Women's briefs in cotton will work.	
Hiking Shorts	Purchase Only	\$15-\$36	1 pair	Loose fitting nylon athletic or river shorts. No cotton.	
Base Layer (mid-weight synthetic)	Purchase Only	\$22-\$38	1-2	Light or mid-weight bottoms of high performance polyester, Capilene®, Smartwool or Polartec Power Dry.	
Mid-Layer (expedition weight fleece pants)	\$20	\$33-\$53	1	Expedition-weight bottoms of Polartec fleece (200 weight or greater) or stretch Capilene®.	
Wind Pants	\$20	\$55	1	Breathable nylon wind pants that are roomy enough to fit over all lower body garments. Zippered legs will help you slip your pants on over hiking boots. We recommend that you rent wind pants from us. NOLS has a custom design that includes zippered legs and reinforced patches at points of wear that holds up well to the rigors of a NOLS course.	
Rain Pants	Purchase Only	\$60-\$125	1	Coated nylon pants to fit over all your layers. <u>Gore-Tex pants are preferable and can be used for both a wind and rain layer.</u>	

Head, Neck and Hand Layers

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Liner Gloves	Purchase Only	\$8-\$16	1-2	Fleece, wool or poly pro liner gloves for sun protection and hiking on cold, wet days.	
Mitten Shells w/Liner	\$15	\$72.50	1 pair	Nylon shells to cover your mittens and/or gloves. Gore-Tex is acceptable. Modular glove and mitten systems will work well. We rent Outdoor Research Glacier Mittens with liners.	



Head, Neck and Hand Layers (cont.)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Baseball Cap or Sun Hat	Purchase Only	\$18.25	1	Necessary for sun protection of your face and ears.	
Wool or Fleece Hat	Purchase Only	\$16-\$30	1	A warm hat made of wool or fleece.	

Assorted Climbing Gear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Ice Axe	\$10	\$75-\$105	1	Ice axe (60 cm to 70 cm) suitable for travel on snow or ice. Personal ice axes need leashes.	
Crampons	\$10	\$150	1	Step-in crampons.	
Helmets	\$8	\$72.00	1	A lightweight, adjustable climbing helmet.	
Backcountry Climbing Harness	\$10	\$29.95	1	Lightweight, fully adjustable harness for backcountry use. Adjustable leg loops are recommended for expedition use so the harness can fit over multiple layers of clothing.	
Rock Climbing Harness	\$5	\$89	1	Bring your own sport harness if you own one. We use Petzl Calidris for our climbing camps.	
Loose Fitting Cotton Pants	Must Bring	Must Bring	1-2 pairs	Bring loose fitting, long pants for rock climbing.	
Climbing Tops	Must Bring	Must Bring	1-2	Bring cotton t-shirts, tank tops, or comfortable shirt to rock climb in.	
Rock Climbing Shoes	\$10	\$70-\$100	1 pair	Examples are the Scarpa Eclipse, LaSportiva Mythos and La Sportiva Enduro.	
Climbing Pack	\$10	\$138.55	1	<u>Needed at climbing camp only.</u> Should be at least 3500 cubic inches capacity.	



Sleeping Gear

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sleeping Bag	\$40	\$150-\$170	1	We recommend synthetic-insulated mummy bags approximately rated 0 to 10°F. Down or feather-filled bags are not suitable for the wet conditions sometimes encountered in the Northwest.	
Compression Stuff Sack	\$6	\$20-\$26	1	Large compression stuff sack for your sleeping bag.	
Sleeping Pad/Therm-A-Rest®	\$8	\$17.75-\$90	1	A full-length closed cell foam pad to insulate and pad beneath your sleeping bag. Therm-A-Rest® full or 3/4 length are for sale only and require a repair kit.	
Sleeping Pad Stuff Sack	\$4	\$13.50	1	A nylon storage bag to protect your sleeping pad.	

Backpack and Storage Bags

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Backpack	\$75	\$344-\$455	1	We rent Lowe Alpine, Deuter and Dana Design internal frame packs. If you decide to purchase an internal frame pack we recommend the Deuter 90+10, Dana Design Astraplane, Mystery Ranch G Series, Gregory Denali, Osprey or any other pack of similar quality and capacity. Internal frame packs must have a volume of 6000 - 7000 cubic inches (98 - 115 liters).	
Ditty Bags	\$2	\$5-\$11	2-3	Small nylon or net bags for organizing items in your pack.	
Plastic Trash Bags	Purchase Only	\$1	2	Heavy-duty lawn and garden bags; a 2 mil/33 gallon bag for waterproofing sleeping bag AND a 3 mil contractor cleanup bag for waterproofing backpack.	



Miscellaneous Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Insulated Mug	Purchase Only	\$5-\$6.50	1	12 oz. to 20 oz. insulated mugs with lids are preferred. Many staff use 16 oz. Nalgene water bottles for their mug.	
Bowl	Purchase Only	\$5	1	A bowl with a snap-on lid. Re-sealable Tupperware® type containers work great.	
Spoon	Purchase Only	\$1	1	Lexan spoons are light, durable.	
Hydration System	Purchase Only	\$8-\$31.75	2	Two water containers are required (64 oz. total.) One needs to be a water bottle. We recommend the other be a Platypus®, Camelbak® or Hydromedary® bag with 64 oz. capacity. Two water bottles are okay.	
Lip Balm	Purchase Only	\$2.50	1-2	We recommend SPF30 or greater.	
Sunscreen Sunblock (Zinc)	Purchase Only	\$4-\$9	1 each	6 ounce tube with SPF 30 or greater. One tube of total sun block like zinc oxide; can be purchased in the baby section of any drugstore.	
Glacier Glasses or Sunglasses	Purchase Only	\$39-\$50	1 pair	Lenses should be dark and 100% UV resistant. You need a sturdy case. Glasses can be wrap around style or good quality sunglasses with side shields. If you have prescription lenses and have limited visibility without them, bring your own prescription glasses or look for a good quality polarized clip-on. Julbo, Smith, Coyote Vision, Oakley, Bolle and Bousche and Lomb are good brands.	
Bandannas	Purchase Only	\$2	1-2	Useful for a variety of purposes.	
Prescription Glasses and Contact Lenses	Must Bring	Must Bring	1 pair	Bring spare glasses or contact lenses. Contact lens wearers should consider bringing a pair of glasses as backup.	
Headlamp	Purchase Only	\$32	1	LED headlamp preferable. Bring spare batteries. We sell Petzl headlamps.	
Batteries	Purchase Only	\$0.85/ea.	1 set	We have AA and AAA for sale.	
Disposable Lighters	Purchase Only	\$1.00	1	Purchase at NOLS due to airline regulations.	



Miscellaneous Items (cont.)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Personal Hygiene Articles	Must Bring	Must Bring	1	Bring travel size toothpaste, toothbrush, brush, and plenty of tampons. We have toothbrushes/toothpaste for sale.	
Instant Hand Sanitizer	Purchase Only	\$1.50	1	2 oz. bottle preferable. Alcohol-based for keeping hands clean.	
Notepad	Purchase Only	\$3-\$10	1	A small, lightweight pad is fine. Steno notebooks work well.	
Pen	Purchase Only	\$.75	1-2	Pen or pencil.	
Watch	Must Bring	Must Bring	1	Water-resistant. An alarm and a light feature are helpful.	
Sunglass Retainers	Purchase Only	\$5	1	Chums® or Croakies® for your glasses or sunglasses.	
Remember to bring a passport OR certified birth certificate AND photo ID for courses going to Canada.					

Optional Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Coffee	Purchase Only	\$10/lb.	1	Bring if you enjoy specialty coffee for yourself in the morning. Coffee is not supplied in the NOLS ration.	
Vitamins	Not Available	Not Available	1	Some students bring a multi-vitamin to supplement the diet.	
Adjustable Trekking Poles	Not Available	Not Available	1	Bring if you like to use a ski pole while you hike. 2-3 section telescoping poles ease packing.	
Camera and Film	Purchase Only	\$7	1	Compact camera with protective case. No heavy lenses/elaborate set-ups.	
Fleece or Insulated Vest	\$18	\$45	1	A fleece vest of Polartec® 200 or a synthetic filled vest. This is an additional layer if you tend to get cold.	
Balaclava	\$5	\$18	1	Pile or fleece balaclavas provide protection and insulation under severe conditions and provide excellent insulation when in the sleeping bag.	
Insect Repellent	Purchase Only	\$6	1	A small bottle or tube. No aerosol spray cans.	
Mosquito Headnet	\$4	\$10	1	Mesh headnet with drawstring to protect from bugs.	



Footwear

You need a sturdy boot with good ankle support and proper fit for hiking on uneven terrain with heavy expedition packs. You'll need gaiters, camp shoes and at least 5 pair of hiking socks. If you sleep cold, bring an extra pair of socks for your sleeping bag. Depending on your instructors, some courses will use fleece booties inside the plastic mountaineering shells around camp instead of camp shoes. If you decide to purchase boots in advance please refer to the Boot Fitting Guide included in your enrollment packet.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Plastic or Synthetic Composite Mountaineering Boots	\$50	\$275-\$340	1 pair	Plastic boots are designed for extreme conditions. They are called "double boots," which means they have a warm removable liner with a firm plastic shell. They perform well in rocky terrain, snow, extreme cold and wet conditions. This is a great type of boot for beginners and high altitude mountaineering. Synthetic hybrid boots are the new boots in mountaineering. Many of these boots contain a mix of plastic and synthetic material often with Gore-Tex® liners. These new designs are durable and light. See page 9 for specific recommendation for plastic and synthetic hybrid boots.	
Insoles	Purchase Only	\$14	1 pair	To assure your comfort in hiking boots, an after market insole (available for purchase separate from footwear) can provide arch support, stabilize your foot and heel, add cushion and help volume adjustment. Suggestions would be Spenco Polysorb®, Superfeet, Montrail Stabilizing Insoles.	
Socks	Purchase Only	\$8-\$16	4-6 pairs	Crew length. Socks must be heavy wool or wool/polypropylene blend. Thorlo® and Smartwool® are good choices.	
Liner Socks	Purchase Only	\$5	2 pair	Lightweight wool, polypropylene or Capilene® "wick dry" socks.	
Gaiters	Purchase Only	\$25-\$55	1 pair	Worn over the boots to keep out dirt and snow. Gaiters with zippers should have a double closure system either Velcro or snaps. OR Crocodiles® and Mtn. Hardwear Ventigaiters® have a Velcro front opening and work well. Gaiters with tight elastic around the boot cuff are not acceptable. Gaiters must be large enough to fit comfortably over plastic boots.	



Footwear (cont.)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Camp Shoes	Must Bring	Must Bring	1 pair	Running, tennis or cross-training shoes, in good condition, to wear around camp. Avoid expensive shoes. Open-toed "river" or "mountain" sandals are not acceptable. Think lightweight!	
Booties	\$10	\$40-\$52	1 pair	Synthetic-fill or Polartec® booties (down is acceptable) to wear around camp inside the shells of plastic mountaineering boots.	

Recommended Boots

NOLS Pacific Northwest rents plastic double mountaineering boots. The following boot should help you define what boots are acceptable for a mountaineering course at the PNW. All boots must be step-in crampon compatible and have a removable inner bootie. A removable liner allows you to dry the boots after a day of hiking. Leather boots are not acceptable for mountaineering courses.

Plastic Boots

Koflach: Vertical
 Koflach: Degree
 Koflach: Arctic Extreme
 Lowa: Civetta
 Scarpa: Invernos
 Scarpa: Omega

Synthetic Hybrid Boots

Vasque: Ice 9000
 La Sportiva: Nuptse

GROUP EQUIPMENT

Expedition members share both the use of and the responsibility for the group gear that NOLS issues. NOLS charges only for group equipment that gets 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 factors we consider when we select our gear.

Tent	Cooking Gear/Spice Kits
Stove	Potable Aqua
Books	Snow protection
Fuel Bottles/Funnel	Maps
Compass	Climbing protection
Shovel	Repair kits
Climbing Ropes	



FIRST AID:

Our instructors carry adequate first aid kits. There is no need to bring your own.

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 who spend less than your deposit will be refunded by mail. If you anticipate a balance over your equipment deposit, please make arrangements for payment on the final day of your course. Acceptable payment methods are cash, personal checks, traveler's checks, VISA, or Mastercard.

TO ESTIMATE YOUR EQUIPMENT FEES FOR YOUR NOLS COURSE:

1. Total projected rental charges from NOLS (Listed rental prices are for the entire course.)		\$
2. Total projected purchases from NOLS: (Estimated from the checklist)	+	\$
3. Add lines 1 and 2: This is your estimated total for RENTALS and PURCHASES.	=	\$
4. Equipment deposit you have on credit (See your account statement for amount.)	-	\$
5. Subtract line 4 from line 3: This is your FINAL ESTIMATED BALANCE.	=	\$

