



**NOLS ALUMNI COURSE
MT. RAINIER EXPEDITION
JULY 22 – 26, 2012
EQUIPMENT LIST**

Please review this equipment list thoroughly. Most everything you need for your trip is listed along with its availability from NOLS. We recommend that you use this list to help you pack. Please read the item descriptions carefully before making your equipment purchasing and packing decisions. Don't hesitate to call NOLS Pacific Northwest at 360-445-6657 or email us at pnw_outfitting@nols.edu if you have ANY questions about gear for your upcoming Rainier trip!

GROUP EQUIPMENT

All items listed in this section are provided by NOLS and are shared among all expedition members. Group equipment is included as part of the course tuition, although participants will be charged for any lost or damaged group equipment. Please note that rental and purchase prices are subject to change.

Tents, Shelters, Trowels	Cooking Gear & Food
Camp Stoves & Fuel	Water Treatment
Climbing Gear	First Aid Kits & Emergency Communication
Maps and Compass	

PERSONAL EQUIPMENT

Upper Body Layers				
We layer our clothing, combining different garments to achieve optimum insulation and protection from wind, rain and snow. We use either synthetic or wool fibers, which insulate when wet. We avoid cotton, which is poor insulation when wet. It is common to need 3 insulating layers and a vest.				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Base Layer (Mid-Weight Synthetic)	Purchase at NOLS	\$40-\$60	1	Mid-weight underwear top made of wool, synthetic, or Capilene®
Middle Layer (Fleece Pullover)	Purchase at NOLS	\$60-\$155	1	Polyester fleece pullover/expedition weight top of Polartec® 100 or 200, or a wool sweater.
Top Layer (Synthetic Puff Jacket)	\$7	\$170-\$200	1	Synthetic full-length zip jacket. Fleece or fiberfill jacket of Polartec® 300 or equivalent weight. We carry the Mountain Hardwear Compressor Jacket.
Wind Shirt	\$7	\$55	1	A lightweight, breathable, durable nylon wind shell in either pullover or parka style. Lightweight nylon exercise jackets usually are not sturdy enough to survive a NOLS course.

Rain Jacket	Purchase at NOLS	\$100-\$150	1	A sturdy, roomy waterproof jacket with a hood. Both coated nylon and breathable fabrics such as Gore-Tex® are acceptable.
T-shirt	Purchase at NOLS	\$28- \$35	1	A lightweight polyester / Capilene® T-shirt. No cotton.

Lower Body Layers				
You will need 1-2 synthetic insulating layers (usually an under layer and a pair of fleece pants). All must fit comfortably over each other so that they can be worn at the same time. If you tend to get cold easily, add a middle layer of mid-weight bottoms to the under layer and fleece pants.				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Base Layer (Mid-Weight Synthetic)	Purchase at NOLS	\$30-\$45	1 pair	Mid-weight bottoms of high performance polyester, synthetic, or Capilene®. Cotton and cotton blends are not acceptable.
Middle Layer (Exp-Weight Synthetic)	Purchase at NOLS	\$40-\$60	1 pair	Expedition-weight bottoms that fit comfortably over the under layer bottoms.
Fleece Pants	\$7	\$60	1 pair	Polartec® 200 or equivalent. Side zippers (full length, or knee high) make it easier to put pants on over hiking boots. Optional for August courses.
Wind Pants	\$7	\$60	1 pair	Nylon shell pants. Must fit comfortably over all lower-body layers. Side-zippers allow the pants to be put on over boots. Breathable fabrics such as Gore-Tex are acceptable, but lightweight "running pants" are NOT durable enough. If you own Gore-Tex bibs, we recommend that you bring them. We recommend renting NOLS wind pants. They are the most popular piece of equipment NOLS has designed. Many students purchase their wind pants at the end of their course.
Rain Pants	Purchase at NOLS	\$90-\$150	1 pair	Optional. Although not required, some people like to use rain pants in conjunction with a rain jacket.
Nylon Shorts	Purchase at NOLS	\$40-\$60	1 pair	Loose-fitting nylon athletic/river shorts.
Briefs/Sports Bras	Purchase at NOLS	\$18-\$32	1 pair	Optional. We recommend men go without underwear, and use nylon shorts with liners. Women can wear what's comfortable; cotton, silk, or synthetics are fine. Bras must be silk or synthetic.

Head, Neck & Hand Layers				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Baseball Cap or Wide Brim Hat	Purchase at NOLS	\$18.95	1	To protect ears and face from the sun. Available with NOLS logo.
Balaclava	\$1	\$17	1	Optional. Balaclavas are full head and neck coverings that have an opening for the face. They are usually made out of Polartec® 100 or 200 fleece.
Wool/ Fleece Hat	Purchase at NOLS	\$15-\$22.50	1	A warm hat made of wool or fleece.
Mosquito Headnet	\$0.50	\$6	1	A light nylon headnet.
Liner Gloves	Purchase at NOLS	\$15-\$30	1 pair	Ragg wool or synthetic (fleece).
Mitten Shells	\$3	\$21-\$38	1 pair	Water-proof nylon or Gore-Tex® shells that fit over your mittens or gloves.

Packs & Bags				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Backpack	\$20	\$250	1	Our packs are large expedition packs with a volume of 5500 to 6100 cubic inches made by Deuter exclusively for NOLS. If you bring an internal frame pack, it will be examined by your instructors to determine its suitability for your course and route. It must have a volume of 5500 to 6100 cubic inches.
Small Stuff Sacks	\$2	\$4.00	2 or 3	2 or 3 small nylon or mesh sacks for organizing items in your pack.

Our advice? An expedition backpack is a major purchase. If you don't already own one, we think you should use ours, gain some experience, then make an informed decision on your needs.

Sleeping Gear				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Sleeping Bag	\$10	\$160	1	Synthetic-filled bags (Quallofil®, Hollofil®, Polarguard®, etc.) perform well in the conditions we encounter on Rainier. A bag rated 0° F and having 6-8 inches of loft is required.
Compression Stuff Sack	\$2	\$49.95	1	A stuff sac with compression straps to store sleeping bag in.
Plastic Trash Bags	Purchase at NOLS	\$.50	2 or 3	2-3 heavy-duty lawn and garden bags (33 gallon) to help waterproof your sleeping bag and backpack.
Sleeping Pad	\$1	\$10-\$110	1	Should be closed-cell foam and 3/8" thick. Used for padding and insulation between sleeping bag and ground. We highly recommend and sell self-inflating sleeping mats as one of your pads. Thermarest and Insulmat are great brands.

Miscellaneous Items				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Harness	\$5	\$70	1	We have alpine climbing harnesses to rent, but if you own one, bring it along.
Ice Axe	\$2	\$96	1	Ice axe (15 cm to 70 cm) suitable for travel on snow or ice. Personal ice axes need leashes.
Crampons	\$2	\$150	1 set	Step-in crampons compatible with plastic mountaineering boots.
Helmet	No Charge	\$65.95	1	A lightweight, adjustable climbing helmet.
Bowl	Purchase at NOLS	\$4	1	A bowl with a snap-on lid is handy.
Spoon	Purchase at NOLS	\$1	1	Lexan spoons are light and popular.
Water Bottle	Purchase at NOLS	\$12-\$34.95	1-2	1-2 wide-mouth quart- or liter-size plastic bottles, like Nalgene® bottles.
Lip Balm	Purchase at NOLS	\$3	1	Stick, cream, or tube type moisturizing balm with SPF 15 or greater.
Sunscreen	Purchase at NOLS	\$10-14	1	A 4 oz. ounce tube with sun protection factor (SPF) 15 or greater. We also stock Zinc Oxide.

Bandanas	Purchase at NOLS	\$2	1-2	A few of these are always handy.
Head-Lamp/Flashlight	Purchase at NOLS	\$29-40	1	Durable and lightweight. Headlamps are popular. We sell spare batteries.
Disposable Lighters	Purchase at NOLS	\$1.50	1	Use for lighting your camp stove.
Insect Repellent	Purchase at NOLS	\$5	1	1 small bottles. No aerosol spray cans.
Toiletries	Purchase at NOLS	Varied	1	We have toothpaste, toothbrushes, feminine hygiene articles for sale.
Watch	Purchase at NOLS	\$20-45	1	A watch with an alarm is a nice feature.
Notepad And Pencil	Purchase at NOLS	\$10	1	A small, lightweight pad is fine.
Sunglass Retainers	Purchase at NOLS	\$5	1	Optional. Chums® or Croakies® for keeping track of your glasses or sunglasses. Available with NOLS logo.
Sunglasses	Purchase at NOLS	\$40-\$160	1 pair	Any good quality sunglasses with 100% UV protection will work fine. If you wear prescription lenses and have limited vision without them, bring your own prescription sunglasses or look for a quality pair of clip-on polarized shades at a specialty fishing store. Lenses should be dark and block 100 percent Ultra Violet. Glass lenses will get scratched less than plastic. We sell Native Eyewear and Optic Nerve. Julbo, Smith, Coyote Vision, Oakley, and Bausch & Lomb are good brands.
Instant Hand Sanitizer	Purchase at NOLS	\$2	1	Must have 2 oz. bottle for keeping hands clean.
Pocket Knife	Purchase at NOLS	\$20-45	1	One small knife is sufficient; simple Swiss Army knives are popular.

Footwear				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Boots	\$14	\$175-\$250	1 pair	Traveling and camping almost exclusively on snow and ice, the Rainier trip uses plastic mountaineering boots.
Wool Socks	Purchase at NOLS	\$10-\$19	3 pairs	Heavy ragg wool or heavy wool/synthetic blend.
Liner Socks	Purchase at NOLS	\$6	1 or 2 pairs	Optional. Lightweight wool, polypropylene or Capilene® "wick dry" socks. You will need at least two pairs if you are using a

				liner sock/wool sock combination in your boots.
Gaiters	Purchase at NOLS	\$75	1 pair	Knee high, durable. We sell OR Crocodiles.
Camp Shoes	Must Bring	Must Bring	1 pair	Running, tennis, or cross-training athletic shoes.

Our advice? Your boots are a critical piece of gear. If they're not sturdy, don't provide enough support or don't fit properly with at least a liner and a wool sock, we won't let you use them. If you have any doubts about boots, feel free to give us a call.

Optional Items				
Equipment	Rental Price	Purchase Price	Quantity	Comments
Prescription Glasses And Contact Lenses	Must Bring	Must Bring	2 pair	Bring a spare pair of glasses or lenses. Contact lens wearers should also bring a pair of glasses as backup. Again, prescription sunglasses are nice to have.
Water Treatment	No charge	No charge	1	NOLS supplies Aqua Mira for backcountry water purification. However, if you are sensitive to iodine or chlorine you may want to bring a water filter such as the PUR Scout/Hiker or the Sweetwater Guardian.
Trekking Poles	Purchase at NOLS	\$65-\$79.95	1	Often collapsible, we sell the Black Diamond Trail Back and Leki Eagle.
Camera	Must Bring	Must Bring	1	Lightweight, 35 mm compact cameras are sufficient; bring a protective case. Avoid heavy lenses and elaborate set-ups.
Hydration System	Purchase at NOLS	\$34.95	1	Very handy and popular. We carry the MSR Hydromedary.