

EQUIPMENT GUIDELINES

NOLS ALUMNI SERVICE TRIP

Welcome to the Alumni Service trip. 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 decisions about what equipment you may wish to purchase or bring with you.

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.

Tents and Shelters	Fishing Rod Outfits
Camp Stoves	Small Complete Tackle Kit
Fuel and Fuel Bottles	Maps and Compass
Cooking Gear	Reference Books
Bear Resistant Food Containers	First Aid Kits
Trowels or Shovels	Equipment Repair Kits

Fishing gear:

NOLS will provide the group with rods, reels, line, leaders, tippet, floatant, nippers, flies, and other fishing odds and ends. If you have a favorite pack rod, feel free to bring it along.

FOOTWEAR

Hiking Boots: 1 pair. Sturdy, backpacking boots with good ankle support and proper fit are critical for hiking on uneven terrain with packs. **Boots are purchase only** from NOLS Rocky Mountain and they only have Men's and Women's size from Men's size 6 and larger. **Please read the BOOT FITTING INFORMATION page 3.**

Socks: 3 to 4 pairs. Socks must be heavy rag wool or wool/polypropylene blend.

Gaiters: 1 pair. Worn over the top of hiking boots to keep out dirt, mud and snow. "Tube" type gaiters are the most maintenance free. Gaiters with zippers should have a double closure system. **Optional**

Camp Shoes: 1 pair. Running, tennis, or cross-training athletic shoes, in good condition, to wear around camp. Avoid expensive shoes. Open-toed "river" or "mountain" sandals are **not** acceptable.

CLOTHING

UPPER BODY GARMENTS: You'll need at least 3 insulating layers, plus a wind and a rain layer, which must fit comfortably over each other so they can all be worn at the same time. If you tend to get cold easily, add a vest in addition to the other 3 layers.

Under Layer: 1 mid-weight underwear top of wool, high performance polyester, polypropylene, or Capilene®.

Middle Layer: A mid-weight wool shirt, sweater or polyester pile pullover of Polartec® 100 or 200 type material.

Insulated vest: pile, poly-fill or other for those colder individuals. **Optional.**

Top Layer: A heavyweight, full-length zip pile jacket of Polartec® 200 or 300 type material.

Wind Shirt: A lightweight, breathable, nylon wind shell either pullover or parka style. This must be large enough to fit comfortably over the 3 insulating layers. Gore-Tex® wind gear is acceptable.

Rain wear: A roomy, lightweight waterproof garment which will fit over all 3 insulation layers. You must bring a **rain jacket** and **rain pants** that can fit over all of your layers. Gore-Tex® rainwear is fine. We have rain coats and pants for sale but we may not have sizes to fit small children.

Cotton T-Shirt: 1 (You can substitute a long sleeve sun shirt here.)

LOWER BODY GARMENTS: You'll need at least **2** insulation layers, plus a wind layer, which must fit comfortably over each other so they can all be worn at the same time. If you tend to get cold easily, bring the pile pants as your second layer.

Primary Layer: Mid-weight bottoms of wool, high performance polyester, polypropylene, or Capilene®.

Secondary Layer: Expedition weight bottoms that must fit over the primary layer.

Pile Pants: Polartec® 200. Side zippers make them easier to put on over hiking boots.

Wind Pants: Breathable, nylon wind pants which are roomy enough to fit over all lower body garments. Gore-Tex® wind pants are acceptable. Zippered legs are useful for putting on over hiking boots.

Cotton Pants: Sturdy, loose fitting work pants.

Hiking Shorts: Loose fitting nylon athletic or river shorts.

BACKPACK, STORAGE BAGS, & SLEEPING GEAR

Internal Frame Pack: A medium-sized pack (around 3,000 cubic inch capacity).

Zip Bag: 1 medium-sized zippered nylon bag (approx. 12" x 24"), used as a clothing storage bag.

Sleeping Bag: We recommend synthetic-insulated bags (Quallofil®, Hollofil®, Polarguard®, etc.) for their durability and ease of care in the variety of conditions we encounter on courses. A bag with approximately 3 pounds of fill (rated to 15° or 20° F) is required.

Sleeping Bag Stuff Sack: Extra large for bulky synthetic bags. Compression stuff sacks are required with internal frame packs.

Sleeping Pad: A full length, closed cell foam pad to insulate and pad between the ground and your sleeping bag. Therm-A-Rest® pads with a patch kit are acceptable.

MISCELLANEOUS PERSONAL GEAR

Baseball Cap

Wool or Pile Hat

Mosquito Headnet: A netted hood to provide some relief from the relentless hoards.

Gloves: 1 pair (either wool or Polartec®.)

Work Gloves: Sturdy leather palms.

Cup, bowl and spoon: Tupperware bowls w/lids are recommended.

Water Bottle: 1 wide mouth quart or liter size.

Lip Balm: Stick, cream or tube type moisturizing balm with Sun Protection Factor (SPF)15 or greater.

Sunscreen: 3 to 6 ounce tube with a Sun Protection factor (SPF)15 or greater.

Bandannas: 1 or 2. Useful for a variety of purposes.

Sunglasses: Lenses should block 100% ultraviolet and 95% infrared light. Glasses should have a sturdy case. If you wear glasses, prescription sunglasses are recommended.

Prescription Glasses and Contact Lenses: If you wear them, bring a spare pair of glasses or lenses. Contact lens wearers should also bring a pair of glasses as backup.

Head Lamp (or flashlight): Should be durable and lightweight. Head lamps are preferred. Bring an extra set of batteries and an extra bulb. Flashlight attachment headbands are useful and recommended if you bring a flashlight.

Plastic Trash Bags: 2 heavy-duty lawn and garden bags (1.5 mil, 33 gallon) for making stuff sacks and backpacks more waterproof.

Toilet Articles: Toothbrush, toothpaste, comb, brush, skin lotion, tampons. Travel or trial sizes suggested.

Underwear: 2 changes of cotton underwear should be sufficient. Most women prefer sport bras.

Notebook and Pens/Pencils: A small, lightweight pad is fine.

Watch: Water-resistant.

OPTIONAL ITEMS

Sunglasses Retainers: Chums® or Croakies® for keeping track of your glasses or sunglasses.

Insect Repellent: One small bottle or tube. No aerosol spray cans.

Pocket Knife: One small knife is sufficient; simple Swiss Army knives are best.

Camera and film: Lightweight, compact cameras are sufficient; bring a protective case. Avoid heavy lenses and elaborate set-ups.

Water Filter: NOLS supplies Aqua-Mira for backcountry water purification. You may want to bring your own water filter such as the PUR Scout or Hiker, or the SWEETWATER Guardian.

BOOT FITTING INFORMATION

Please follow these instructions carefully when fitting hiking boots for your NOLS course. It may be helpful to show these instructions to the boot fitter.

Your hiking boots are one of the most important pieces of equipment you will use during your trip. It is imperative that boots fit correctly to minimize the chance of blisters or other foot injuries. In our experience, we have found that a properly fitted boot is more important than a "broken in" boot. If you are purchasing boots for your course, see the list of recommended models below; or if a particular boot you like is not on the list, it should be comparable in design and construction to those listed. If you have any questions about your boots, please call NOLS Rocky Mountain Outfitting at (307) 332-1422; E-mail: kevin_mcgowan@nols.edu or visit our web site to view a boot fitting video:

www.nols.edu/movies/nolsmovies/boot_xl.shtml.

1. It is best to shop for boots in the afternoon since feet tend to swell during the day. Always fit your larger foot. The key to a proper fit is determining the correct length. A boot which is too small will cause more problems than one that is too large. Boots should fit comfortably with either 2 pair of heavy wool socks or 1 pair of liner and heavy wool socks—both systems work fine. These sock combinations provide warmth, cushioning and wick moisture away from the skin helping to reduce the chance of blisters.

2. Start with a boot 1/2 size larger than your normal street shoe size and slip your foot in barefoot. Some boot shops may ask you to wear a thin liner sock. Slide your foot forward until your toes touch the front of the boot. As you lean forward slightly, there should be approximately 1/2" to 3/4" (about 1 finger width) between your heel and the back of the boot. If there is not, the boot is probably too small and you should try a half size larger.
3. Now try on the boots with your favorite combination of 2 pairs of socks and lace the boots snugly. Your toes should be comfortable at the front of the boot, with just a little bit of room to wiggle, and the arch of the boot fitting comfortably under your instep. Walk around the store for a few minutes. Your heels should feel snug in the back of the boot with just enough room to barely lift off the insole of the boot about 1/8"; no heel lift is too little, 1/4" or more is too much. The boot should feel comfortable with no obvious discomfort or pressure points.
4. In a properly fitted boot, your toes will not jam the front of the boot when walking downhill. To determine this in the store, either kick your foot against a solid wall or, if the store has one, walk down a ramp to simulate hiking downhill. If your toes hit on the first kick, or if they jam the front of the boot walking down the ramp, the boot is probably too small or not laced tight enough. Your toes should "nudge" against the front of the boot on the third kick. It is important to realize that a properly fitted boot is going to feel slightly big. It is better to have a boot a bit large than too small.
5. Getting the proper fit takes time. Not all boots fit the same, so try different brands and models. Walk around the store for at least 10 minutes. Think about your feet. Are they comfortable? Any pressure points? If so, try a different width, a different brand or a 1/2 size larger. Remember, it's your feet and your comfort, so take your time!

RECOMMENDED BOOTS:

Medium-weight, off-trail backpacking boots. This type of backpacking boot is constructed with a leather or Nubuck upper and a vibram rubber sole or an injection molded, composite rubber sole with a randed welt to bond the uppers to the sole. These boots are designed for extended backpacking, provide good support for off-trail hiking with heavy packs, and usually require less break-in time than the heavy-weight mountaineering boots. Typical boots in this category include, but are not limited to, the following:

Wilderness; Asolo 520, 535; Boreal Bulen; Garmont Dakota Plus, Bronco Plus, Rebel; LaSportiva TRK; Limmer Mountain; Lowa Treke; Merrell Expedition, Grand Traverse, Wilderness; Raichle Mt.Peak, MT Trail; Scarpa Delta ,SL M3; Tecnica Shasta, Stratus, Voyager2; Vasque Super Hike

<u>√list</u>	Item	Availability
	Footwear	
	Hiking Boots	Purchase Only (for Adults) Not Available in youth sizes.
	Wool Socks	For Sale Only
	Gaiters (optional)	For Sale Only
	Camp Shoes	Not available
	Top Layers- (3)	
	Midweight Underwear Top	Sale Only
	Pile Pullover	Weekly Rental – \$5.00
	Pile Jacket	Weekly Rental – \$5.00
	Wind Anorak or jacket	Weekly Rental – \$5.00
	T-shirt	Sale Only
	Rain coat	Sale only
	Wool or Pile Hat	Weekly Rental – \$1.00
	Baseball cap	Sale Only
	Mosquito headnet	Weekly Rental – \$Free
	Wool or Pile Gloves / mittens (light)	Sale Only
	Bottom Layers (2)	
	Midweight Underwear Bottoms	Sale Only
	Wind Pants	Weekly Rental – \$5.00
	Pile Pants	Weekly Rental – \$5.00
	Underwear	Not Available
	Nylon shorts	Sale Only
	Packs and Sleeping Bags	
	Medium internal frame pack (3000 cubic inches)	Weekly Rental – \$20.00
	Zip bag (approx. 12x24)	Weekly Rental – \$1.00
	Sleeping Bag (rated to 20 F)	Weekly Rental – \$ 10.00
	Compression stuff sack	Weekly Rental – \$3.00
	Sleeping pad (closed cell foam) or Thermarest	Weekly Rental – \$1.00
	Ground sheet (waterproof)	Weekly Rental – \$.50
	Eating Utensils	
	Insulated Mug with lid	Sale Only
	Bowl and spoon	Sale Only
	Water Bottle (1 to .5 liters)	Sale Only
	Miscellaneous Items	
	Lip balm	Sale Only
	Sunscreen	Sale Only
	Sunglasses w/retainer strap	Sale Only
	Bandannas	Sale Only
	Headlamp or flashlight	Sale Only
	Batteries	Sale Only
	Plastic trash bags	Sale Only
	Toilet Articles (toothbrush, toothpaste, comb, etc.)	Not available
	Notebook, pen, pencils	Not available
	Watch (water resistant w/light)	Sale Only
	Insect repellent	Sale Only

	Pocket knife	Sale Only
	Camera and film	Sale Only