

Fall Semester in the Rockies

Equipment List

Welcome to NOLS!

Learning to choose the right equipment for your adventure is an essential part of the NOLS curriculum. We believe you don't need to own a lot of expensive gear to live and travel comfortably outdoors. One of our biggest considerations in gear selection is weight—we strive to keep pack weights as low as possible. An extra pound or two on your back makes a huge difference over weeks in the mountains. We encourage you not to bring anything extra. It will just weigh you down.

When you arrive, your instructors will first look through all the equipment you've brought and help you decide what to take into the field. You'll then go into our Outfitting Department to rent or purchase any remaining items. The list below is comprehensive; however, the actual equipment needed for your course will vary depending on location, season, and instructor judgment. For this reason, we do not recommend that you go out and purchase a lot of expensive, specialized gear for your course.

Here are some thoughts to guide you as you pack:

- **First, use gear you already own!** You'll be comfortable in tried-and-true clothing. Bring more layers than you think you'll need; your instructors will help you choose your best options. If an item is suitable for your particular course, you can take it into the field; if not, you can leave it in storage. If in doubt, bring it!
- **Second, rent key items from NOLS.** When it comes to gear, everyone has their own preferences. In the field, you'll have the opportunity to hone your preferred system. We highly recommend that you rent, rather than purchase, several "big ticket" items, such as a sleeping bag and backpack. While you are not obligated to rent gear from us, there are several reasons why we suggest it. Our rental gear is high quality and designed specifically for the heavy use it receives on courses. Rental prices are reasonable (based on wear/tear and duration of use), so you can try out gear and make informed decisions on future adventures.
- **Third, purchase specific items from our Outfitting Department.** To make shopping simple, we offer basic camping essentials and personal care items. The items we sell in our Outfitting Department are tailored to what works well on our courses. Approximate price ranges for the items we sell are listed below - you can use these price ranges to help you decide whether to purchase items ahead of time.
- **Fourth, go shopping before your course.** A few options:
 - REI or a local outdoor store
 - Department stores
 - Thrift stores

- Online

Equipment Fees

In addition to your course tuition, you will pay an equipment deposit. This deposit will be applied directly to the charges you incur for gear rentals, purchases, or any loss or damage to our equipment. Total charges will vary depending on the amount of equipment you rent or purchase from us; the prices listed below will help you estimate your costs. At the end of your course, you will be billed for any amount that exceeds the equipment deposit, or refunded any balance.

How to Use This List

Items under the **Required** heading are items that you **must** either bring yourself or rent or purchase from NOLS as available. Items under the **Optional** heading are not required, and you may bring them from home, buy, or rent from NOLS as available. If you see an **X** in the price column, that means that an item is not available for rent or for purchase as indicated.

Feedback?

NOLS is trying to update this list to be more welcoming and effective. If you are willing to provide some feedback to help our effort please take this [survey](#).

Questions?

Contact your Admission Officer if you have any questions or would like further information about the equipment list.

Upper Body Clothing			
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, both of which insulate when wet; merino wool products are increasingly popular. We avoid cotton, which is poor insulation when wet. Down jackets are popular, though it takes work and planning to keep them dry. It is common to need 3 insulating layers.			
Equipment	Rent	Buy	Notes
Required Items			
Base layer	X	\$70	Mid-weight long underwear top, non-cotton (e.g. Patagonia Capilene, Terramar Performance, Icebreaker Body Zone)
Middle layer	X	\$50-180	Fleece jacket (e.g. Patagonia R-1, Mountain Hardwear Microchill, etc.) or a wool sweater
Top layers (2)	X	\$95-220	A warm “puffy” jacket that fits over your base layers In colder weather, we recommend having two: one lighter jacket and one heavier jacket that have synthetic or down fill. Lighter puffy jackets include

			Mountain Hardwear Compressor, Montbell Thermawrap, Patagonia Nano Puff. Heavier puffy jackets include Patagonia Macro Puff, etc.
Wind Shirt	\$40	\$55-100	A lightweight, breathable, durable nylon wind shell.
Rain jacket	X	\$100-150	A sturdy waterproof jacket with a hood. Both coated nylon and breathable fabrics are acceptable (e.g. Gore-Tex, Marmot Precip, Mountain Hardwear Dry.Q, Patagonia H2No)
Sports bra (2-3)	X	\$40	Lightweight bras that offer adequate support. Synthetic or natural fibers (non-cotton) that dry quickly are preferable.
Optional Items			
T-shirt	X	\$25-50	A lightweight synthetic or wool t-shirt
Sun Hoody	X	\$60-70	A lightweight synthetic or natural fiber (non-cotton) hoody that provides both sun protection and works well as a base layer.
Our advice? Bring the sweaters, fleece jackets, and synthetic/down layers you think might work. We'll advise you on the best combination for your trip, depending on the season and course area.			
Lower Body Clothing			
You will need 2 synthetic insulating layers (usually a base layer and a pair of fleece or puffy 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 base layer and fleece/puffy pants.			
Equipment	Rent	Buy	Notes
Required Items			
Base layer (2)	X	\$70	Mid-weight non-cotton bottoms (e.g. Patagonia Capilene, Terramar Performance, Icebreaker Bodyfit Zone).
Fleece/Puffy pants	\$40	\$60-\$200	Heavier-weight bottoms that fit comfortably over the base-layer bottoms. Puffy pants like the Mountain Hardwear Compressor or the Montbell Thermawrap are very popular. Rental price is for fleece pants.
Wind pants/Hiking pants	\$40	\$80	Durable nylon pants. These should fit comfortably over base layers. Side-zippers allow the pants to be put on over boots. Soft-shell fabrics are acceptable, but lightweight "running pants" are not durable enough.
Underwear (3-6 pairs)	X	\$20-35	Clean underwear is essential for backcountry hygiene. Though you will have opportunities for laundry, having a supply of underwear for your semester is helpful.

			Synthetic or natural fibers (non-cotton) are great options.
Optional Items			
Shorts	X	X	Loose-fitting nylon athletic or river shorts
Rain pants	X	\$80-110	Although not required, some people like to use rain pants in conjunction with a rain jacket.
Our advice? Bring the synthetic base layers, leggings, rain gear, and exercise clothing you think might work. We'll advise you on the best combination for your trip, depending on the season and course area.			
Head, Neck, and Hand Layers			
Equipment	Rent	Buy	Notes
Required Items			
Baseball cap or wide-brim sun hat	X	\$16-35	Lightweight headwear to protect ears and face from the sun. We sell a variety of visors, trucker hats, and running hats.
Wool or fleece hat	X	\$20-35	Thick enough to keep your head and ears warm on chilly nights.
Sunglasses	X	\$30-80	Sunglasses with 100-percent UV protection; lenses should be dark. If you wear prescription lenses and have limited vision without them, bring your own prescription sunglasses, clip-ons, or over glasses. We sell Suncloud and Optic Nerve.
Prescription glasses and contact lenses (2-3 pairs)	X	X	Bring a spare pair of glasses or lenses. Contact-lens wearers should also bring a pair of glasses as backup.
Sunglasses retainer	X	\$8	Chums or Croakies for keeping track of eyewear
Gloves or mittens	X	\$17-55	Ragg wool or fleece. See "Winter Section" for greater detail.
Optional Items			
Neck Gaiter/ Buff	X	\$22	Neck gaiters are synthetic pieces of multi-functional headwear (hat, bandana, neck warmer, etc.). Buff is a common brand
Mitten shells	\$10	\$38-45	Water-repellent nylon shells that fit over your mittens or gloves
Our advice? As long as they're not cotton, bring your gloves, mittens, and shells. We'll check them and see if they'll work. Depending on the weather, you may need one or two pairs. On the winter section, you might need every pair of gloves/mittens you have.			

Packs and Bags			
Equipment	Rent	Buy	Notes
Required Items			
Backpack	\$120	\$300	Our packs are large expedition models, with a volume of 80–110 liters, made by Deuter exclusively for NOLS. If you bring an internal frame pack, your instructors will examine it to determine its suitability for your course and route. It must have a volume of 80–110 liters.
Small stuff sack (2-3)	\$2	\$4	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 rent ours, gain some experience, then make an informed decision after your course.			
Sleeping Gear			
Equipment	Rent	Buy	Notes
Required Items			
Sleeping bag	\$100	\$220-350	Synthetic-fill bags (e.g. Thermolite, Thermal.Q, APEX, etc.) perform well in the variety of conditions we encounter on courses. A bag rated to 0° or 15°F. Fall and spring semester students will also need a separate bag for the winter section (synthetic filled bag rated to at least -20°F).
Compression sack	\$12	\$40	Stuff sack that packs sleeping bag into a smaller size than a regular stuff sack would
Plastic trash bag (2-3)	X	\$1	2–3 heavy-duty lawn-and-garden bags (33 gallon/2-3mm) to help waterproof your gear
Foam or inflatable sleeping pad	\$15	\$35-220	Used for padding and insulation between sleeping bag and ground. Foam pads, which we rent, should be closed-cell and at least 3/8-inch thick and have at least an R-Value of 2.0. Inflatable pads, which we don't rent, work as well; Therm-a-Rest and REI are reliable brands.
Ground cloth	\$8	\$20	A waterproof nylon sheet to go between your sleeping pad and the ground
Our advice? A sleeping bag is another major purchase. If you don't already own one, we think you should rent ours, gain some experience, and then make an informed decision after your course.			
Footwear			

Equipment	Rent	Buy	Notes
Required Items			
Boots	X	\$170-250	Sturdy, expedition backpacking footwear with adequate support for extended wilderness courses. See information at the end of the equipment list for more ideas about boots.
Wool Socks (4-5 pairs)	X	\$13-30	Mid to Heavyweight wool socks (eg. Smartwool, FITS, Wigwam)
Gaiters	\$20	\$50	Shin or knee-high and durable. Lightweight trail-running gaiters are not recommended.
Camp Shoes	X	\$40-90	Running/athletic shoes. Closed toe required. Many students also use Crocs because they are lightweight.
Optional Items			
Hiking shoe	X	X	Some students appreciate having a low-top hiker or approach shoe to wear during their Climb/Canyon section. (eg. Salomon X Ultra, La Sportiva TX4)
Our advice? Your boots will be a critical piece of gear. If they're not sturdy, don't provide enough support, or don't fit properly with wool socks, we won't let you use them. If you have any doubts about boots, feel free to give us a call.			
Rock Climbing Section			
Equipment	Rent	Buy	Notes
Required Items			
Rock climbing shoes	\$40	\$85-100	We rent Black Diamond, Scarpa, La Sportiva and Butora shoes. Available size range: 37-48 (Euro). If you bring your own, make sure they are comfortable enough to spend all day in.
Harness	No charge	\$40-70	We have harnesses to rent, free of charge, but if you own one, bring it along.
Helmet	No charge	X	We have helmets to rent, free of charge, but if you own one, bring it along.
Optional Items			
Crag Pack	\$40	\$50-100	A medium-sized daypack with 50-60L capacity. This can double as a ski pack on your Winter section.
Climbing pants/shorts	X	\$79	Comfortable pants to wear while climbing, either cotton or synthetic. Short shorts are not optimal for climbing with a harness
T-shirts (1-2)	X	\$25	An extra T-shirt or two is always nice to have at climb camp. These can be cotton.

Chalk Bag	\$6	\$25	Some people like to rock climb with a chalk bag to keep their hands and fingers dry. It is not necessary.
Our advice? If you own a harness, helmet, chalk bag, or climbing shoes, bring them along. If your instructors approve, you can use them. We will use NOLS' protection, belay devices, slings, carabiners, and ropes.			
River Section			
Equipment	Rent	Buy	Notes
Required Items			
River shoes	X	X	A simple solid sneaker or river shoe with full foot coverage and sturdy soles. (Keens or other semi-coverage shoes are not appropriate for the conditions). Consider shoes big enough to fit multiple pairs of socks in cold weather.
Long-sleeved UV-protective shirt	X	\$60-75	Light-colored, long-sleeved nylon shirt for sun protection. Hoods encouraged.
Lightweight cotton pants and shirt	X	X	Convenient sun protection around camp
Base Layer (long underwear) (2)	X	\$15-50	On the river, it's essential to designate long underwear sets as "wet" on the river and "dry" in camp. Plan to bring 2 full sets to the river section (can be the same from other sections--no cotton or cotton blends).
Swimsuit	X	X	Most students prefer wearing nylon shorts. A sports bra-type top with nylon shorts can work as well. Lycra swimsuits are also an option.
Large dry bag	\$27	\$90-125	3-cubic-foot dry bag made of heavy-duty waterproof material. Used to carry all personal clothing
Small dry bag	\$7	\$35	600-cubic-inch dry bag made of heavy-duty waterproof material. Used to carry all personal items needed during the day
Water-insulating breathable long-sleeve top	\$17	\$60-85	A top mid-layer; water-insulating, breathable fabric (e.g. Neoprene or Hydroskin) used in place of a 3mm wetsuit
Water-insulating breathable bottom	\$17	\$60-85	A bottom mid-layer; water-insulating, breathable, fabric (e.g. Neoprene or NRS Hydroskin) used in place of a 3mm wetsuit

Paddle jacket	\$15	\$50-85	A top outer-layer, long-sleeve, water resistant jacket with closures at the bottom, wrist and neck. To be worn over other layers when kayaking or rafting (separate from a rain coat for camp)
Paddling Gloves	X	\$30	For warmth/hand protection while on the water. 1mm gloves are helpful for earlier season sections. 3mm are ideal for later season sections.
Optional Items			
Sarong/Wrap	X	X	Helpful for changing around camp and as a lightweight, breathable layer
Wetsuit	\$25	X	This is an expensive item; please do not go out and purchase it if you do not already have one. We suggest a full-body wetsuit of 3mm thickness. Alternatively, pants and a long-sleeve top made of 3mm neoprene are acceptable.
Neoprene booties	\$10	\$20-40	River or diving booties that stay on the foot securely while swimming. Must have a hard sole capable of walking on rocks. Used primarily for cold weather and in kayaks.
Neoprene Socks	\$6	\$20-30	Neoprene or hydroskin socks meant to be worn inside river shoes to help insulate feet (2mm). Essential for spring courses (March-May) and late fall courses (October-November). Can be paired with wool socks for comfort.
Beach Wrap or large sarong	X	X	This can provide privacy when changing lower body layers in open spaces.
Our advice? Rental of whitewater-specific gear (PFD, helmet, etc.) is included in your tuition. Feel free to bring any personal whitewater gear you already have (e.g. paddling jacket, dry top, river booties, helmet, etc.) and your instructors will check it to make sure it is appropriate for your trip. When planning for the river section, know that there is room for many of the luxuries you might bring to climb camp or even base camping (camp chair, sandals, extra hat, etc).			
Winter Section			
For semesters with winter sections only. Winter sections will require additional insulating layers, and skiing and winter camping gear.			
Equipment	Rent	Buy	Notes
Required Items			
Winter Sleeping Bag	\$50	\$220-350	Students will also need a separate bag for winter conditions (synthetic filled bag rated to -20°F).
Insulated parka	\$40	\$350	A synthetic-fill winter parka with hood. Must fit comfortably over all your upper body layers. We have specially-made, heavy parkas that we rent. (ex.

			Patagonia Das Parka or Black Diamond Stance Belay Parka)
Insulated pants	\$30	\$240	Synthetic-fill pants. Must fit comfortably over all your lower body layers. NOLS has custom, heavy-duty pants that we rent to students.
Bootie System	\$20	X	Three-part custom winter insulated bootie system containing an inner, outer, and over bootie to wear in camp and while sleeping.
Insulated mittens	\$12	\$35	Synthetic-fill mittens that fit over your other mittens and gloves
Extra mittens/gloves	X	\$12-60	You should bring any liner, wool, fleece, heavy gloves or mittens that you have. Students often take as many as 6 pairs of gloves/mittens into the winter section.
Thermos	X	\$30-50	.75L - 1.2L capacity. Some people even bring more than one.
Ski Pack	\$30	X	Backcountry ski packs with pockets for avalanche gear. Generally 40-50L in capacity.
Ski boots	\$85	\$400-600	We rent Black Diamond alpine touring (AT) ski boots. We stock ski boots in sizes 6–13; if you are outside the size range, please contact us before your course begins. Your boots will need to fit properly over two pairs of socks with an insole.
Skis, poles, and skins	\$100	\$400	We use backcountry alpine-touring skis and bindings.
Avalanche transceivers	No charge	\$250	NOLS provides avalanche transceivers for all students to use, free of charge.
Helmet	No charge	X	A ski/snowboard helmet is not required. You can bring your own or borrow one from NOLS for free.
Optional Items			
Ski Shells/Rain Pants	X	X	If you have ski pants with built in gaiters at the bottom of the legs, bring them. You might want to use them on your winter section.
Our advice? Our winter gear is specialized for our expeditions. If you own a pair of ski bibs or pants, or a thick winter parka, bring it along and we'll check it. If you already own alpine touring (AT) or telemark skis you'd like to use, please give us a call before your course begins; we'll make sure they're appropriate for winter backcountry travel.			
Toiletries			

Self-care in the outdoors is an essential component of any expedition. Whatever systems you use to take care of yourself in your daily life can often be modified to the appropriate size/quantity for your course. Any starred (*) item is something that we sell at NOLS.

Equipment	Rent	Buy	Notes
Required Items			
Lip balm	X	\$3-5	Stick, cream, or tube-type moisturizing balm, SPF 15 or greater. Products with zinc provide superior protection.
Sunscreen	X	\$5-10	At least 3-6 oz., SPF 30 or greater. Products with zinc provide superior protection.
Dental Care	X	\$3-6	Whatever your oral hygiene system is (toothpaste*, toothbrush*, floss*, retainer, etc.), you can likely adapt it to your course using trial or travel size versions.
Skin Care	X	\$7	You may want to consider lotion* (preferably unscented) or Vaseline in 3-5 oz travel-sized bottle, wash cloth-sized pack towel* for backcountry bathing, and ointment for scrapes if you are prone to scarring.
Menstrual products	X	\$5-35	Required if you menstruate. Bring the products which work well for you, and bring slightly more supplies than you think you might need. This might mean tampons*, pads*, a menstrual cup*, or some combo thereof.
Personal Medications	X	X	Any prescriptions/supplements that are part of your system should be brought in sufficient quantities.

Our advice? Bring what you think will support your health on course, minimizing bulk and extra quantity where possible. Travel-size containers can be helpful in this process.

Miscellaneous Items

Equipment	Rent	Buy	Notes
Required Items			
Bowl	X	\$7	A plastic bowl with a screw- or snap-on lid is handy.
Spoon	X	\$3-\$13	Lexan spoons are light, durable, and popular.
Water bottle (1-2)	X	\$14-16	1–2 wide-mouth quart- or liter-size plastic bottles
Bandana (1-2)	X	\$2	Useful for a variety of purposes from wiping post-pee to sneezing, from a cooling neck tie to wiping your bowl.
Headlamp	X	\$30	Durable and lightweight. Bring spare batteries.

Batteries	X	\$1	AA/AAA are available for sale. We recommend 2 full sets for your headlamp.
Disposable lighter (2)	X	\$1.75	For lighting your camp stove
Watch	X	\$25	A watch with an alarm is a nice feature.
Pen/Pencil	X	\$0.75	For journaling and taking notes during classes
Notepad	X	\$6-15	A small, lightweight pad is fine.
Optional Items			
Book or e-reader	X	X	A lightweight paperback book or e-reader. Tablet-style e-readers (e.g. Kindle Fire) are not acceptable. We recommend bringing a padded case as well.
Trekking poles	\$12	X	A sturdy telescoping pole for easy packing. We rent trekking poles for the hiking sections only.
Camera	X	X	GoPros and lightweight digital or 35mm cameras are acceptable; bring a protective case. Avoid elaborate lenses and heavy SLRs. (Please note: you may not bring your smartphone or tablet into the field to use as a digital camera.)
Camp chair	X	\$40-50	Crazy Creek-style, or a sleeping-pad adapter.
Hydration system	X	X	An alternative hydration system, whether a Camelbak, Platypus, etc.
Pocket knife	X	\$25-50	One small knife is sufficient; simple folding knives are popular.
Our advice? Keep the toiletries, pocket knife, camera, optional items and other gear to small sizes. We work to keep our pack weight as low as possible.			
Wilderness First Aid & Responder (WFA/WFR) Section			
Equipment	Rent	Buy	Notes
Required Items			
Clothing and shoes for indoor and outdoor class environments	X	X	You will need clothing appropriate to an indoor and outdoor class environment. Many of your layers for your field sections will be relevant during the WFR, but it is nice to have more in-town options available. We suggest a comfortable pair of indoor shoes or slippers. Fall temperatures will range from -5° to 60°F, with the potential for multiple feet of snow. Bring 3-5 days of clothing.
Sturdy Footwear	X	X	You will be outside on a simulated rescue for multiple hours. Your hiking shoes/boots will likely be sufficient.

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 and shelters
Trowel or shovel
Stoves, fuel bottles and fuel
Pots and pans
Maps and compasses
Bear-resistant food containers
Fishing gear
Equipment repair kits
Reference books
Binoculars
First aid kits
Climbing protection*
Climbing ropes*
Helmets and harnesses*
Ice axes*
Snowshoes*
**if applicable to course type*

Rocky Mountain Hiking Shoe/Boot Recommendations

Medium-weight, off-trail backpacking shoes or lightweight boots work best. They provide good support for off-trail hiking with heavy packs. Here are some features to look for:

- Durable outer material, such as leather or thick nylon, that will withstand hiking among sharp boulders and dense vegetation. Full mesh is not appropriate.
- A waterproof Gore-Tex liner can be beneficial, but is not required. Your feet will get wet if water comes in over the top of your boot.
- A sole that provides a stable footbed and protection from sharp rocks and other surfaces, like Vibram®. Typical running shoes are not supportive enough for a NOLS expedition.
- Mid-top or high-top ankle coverage can be helpful in snowy or wet conditions (June 1 - July 1). High-top ankle coverage can also be helpful if you have a tendency to roll your ankles. Below-the-ankle hiking shoes work well in drier conditions (later summer and canyon courses)
- Comfortable fit with your preferred hiking socks. Shoes that are too small commonly cause blisters.

The following list of acceptable boots is not exhaustive and is to be used for suggestions only. It is fine to substitute a similar boot for one of those listed here.

These are the two brands we sell in our outfitting store:

- La Sportiva: TX4, TX4 Evo
- Salomon: X Ultra 3 Mid GTX

These are other good options:

- Asolo: Acadia
- Keen: Targhee II/III Mid
- Altra: Lone Peak Hiker
- HOKA ONE: Anacapa Mid, Kaha
- Lowa: Camino, Ranger, Trekker, Mauria, Explorer, Lady Light
- Oboz: Sawtooth
- Scarpa: Kailash, Rush, Ribelle

Note that manufacturers often rename their product lines. Visit the manufacturer's website or contact us if you have questions.