

Southwest Wilderness Medicine Expedition Equipment List

Welcome to NOLS! It's important to choose the right equipment for any outdoor adventure. This list is designed to help you make smart decisions about the gear you take on your course.

When you arrive, your instructors will look through 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. We've made every effort to ensure that this equipment list is reflective of what you will need on your course, but your actual needs will vary depending on season and instructor judgment. We encourage you to keep the tags on all clothing, and the receipt at home, so that you may later return any unneeded items.

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. You can always leave items in storage at the campus.
- **Second, rent key items from NOLS.** When it comes to gear, every adventurer has their own preferences. In the field, you'll have the opportunity to hone your preferred system. We 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, chosen specifically for the heavy use it receives on courses. Rental prices are reasonable, so you can try out gear and make informed decisions on future adventures. After your course, you may purchase any of the items you rented at a reduced cost; this is a great way to begin building your personal gear closet.
- **Third, purchase specific items from our Outfitting Department.** To make shopping simple, we offer basic kitchen utensils (mug, bowl with lid, spoon, 32-ounce water bottle), personal care items (lip balm, sunscreen, etc.), and camping sundries (headlamp, batteries, lighter). NOLS is a not-for-profit organization, and revenue from our Outfitting Department goes to serve the mission of the school.

- **Fourth, visit your local outdoor store.** Most gear shops, from REI and EMS to mom-and-pop outfits, are familiar with NOLS and its courses. They can advise you on purchases—but be wary of being “upsold” items you don’t really need! We encourage you to keep the tags on all equipment and clothing (and the receipt) so that you may return any unneeded items.

Quality over Quantity

At NOLS, we fundamentally believe that you don’t need to own a lot of expensive gear to live and travel comfortably in the backcountry. By purchasing high-quality items and learning to care for them, you’re making a lifetime investment. Spend money on the few items that really matter, and don’t get lured into splurging on the trendiest fabrics or latest gadgets.

Questions?

Please contact NOLS Southwest at (520) 749-0955.

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.

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. It is common to need three insulating layers plus a rain layer.			
Equipment	Rent	Buy	Notes
Required Items			
Long underwear top (base layer)	X	\$38-70	Light- or mid-weight long-sleeve top, wool or synthetic [Example: Patagonia Lightweight Crew]
Middle layer (fleece top)	X	\$50-160	Heavier than a base layer top, but lighter than an outer jacket. Aim for material that’s fleece,

			wool or synthetic. [Example: Patagonia R1 Hoody]
Top layer (“puffy” jacket)	\$25 (synthetic)	\$180-250	A warm, synthetic or down-fill insulated “puffy” jacket that fits over your other layers and under your rain jacket. A hood is recommended. Please note that down requires extra care in wet conditions. [Examples: Montbell Thermawrap, Patagonia Nano Puff]
Hiking shirt	X	\$40-70	One lightweight synthetic shirt or wool for backpacking. Consider a polyester-cotton blend button down dress shirt for a hiking shirt, inexpensive at a thrift store. If you want extra sun protection, look for clothing with a Ultraviolet Protection Factor (UPF) rating. [Example: Patagonia Lightweight T-shirt]
Rain jacket	X	\$100	Durable, waterproof, non-insulated jacket with hood. Coated nylon or breathable fabrics (e.g., Gore-Tex, H2No, etc.) are both acceptable. It is important that your rain jacket fits well over all your base and mid-layers. [Example: Marmot Precip Jacket]
Sports bra	X	\$35-65	Should be wool or synthetic.
Optional Items			
Wind jacket	\$10	\$100	A lightweight, breathable, nylon wind shell either pullover or full zip style. Hooded wind jackets are recommended. Does not need to be waterproof. [Example: Patagonia Houdini Jacket]
Our advice? Despite its reputation, the desert can get very cold, especially at night and courses often encounter rain and snow. Temperatures get below freezing some nights. Bring the puffy jackets and other layers you think might work. We'll advise you on the best combination for your course and the current weather conditions.			
Lower Body Clothing			
You will need at least two insulating bottom layers, plus a wind layer. All must fit comfortably over each other so that they can be worn at the same time.			
Equipment	Rent	Buy	Notes
Required Items			

Long underwear bottoms	X	\$45-60	Mid-weight synthetic or wool bottoms. Cotton and cotton blends are not acceptable. These could be optional if you are bringing insulated “puffy” pants and consider yourself a “warm” person. [Example: Patagonia Capilene Lightweight Bottoms]
Fleece pants or insulated pants	\$10 (fleece)	\$145-159 (insulated)	Fleece pants or insulated “puffy” pants are both acceptable. We recommend pants with full side zips to have the ability to put on and take off over boots. Can also provide versatility for cold sleepers. [Examples: Montbell TEC Thermawrap or Montbell TEC Down pants]
Hiking pants / Wind pants	\$10 (nylon)	\$69-89	Nylon or synthetic pants. These should fit comfortably over lower-body base layers. Soft-shell fabrics are acceptable, but lightweight “running pants” are not durable enough. We recommend renting NOLS wind pants. [Example: Patagonia Quandary Pants]
Underwear (2-3 pairs)	X	\$20-30	Briefs or boxers; some students prefer to go without underwear and wear quick-drying shorts with liners. Briefs may be cotton, synthetic, wool, or silk.

Optional Items

Hiking shorts	X	\$42-55	Any quick drying pair of nylon shorts, with or without built-in underwear. You may also choose to omit shorts and hike in pants for the duration of the course to save weight. [Example: Patagonia Quandary Short]
Rain Pants	X	\$80-100	A durable, roomy, waterproof pant that can fit over other lower-body layers. A side zipper is convenient for putting them on without having to remove your boots.

Our advice? Bring the synthetic long underwear or pants you think might work. We'll advise you on the best combination for your course.

Head, Neck, and Hand Layers

Equipment	Rent	Buy	Notes
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Required Items

Baseball cap or wide-brim sun hat	X	\$20-25	To protect ears and face from the sun. Consider a full brim for maximum protection, but a typical baseball cap works well. Flexible fabric is
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			recommended over straw or other stiff materials, which are hard to pack and can get in the way of your backpack. A nylon model will dry more quickly, but canvas works well too. Avoid hats made from Gore-Tex or plastics, as they get too hot to hike in.
Warm hat	X	\$20-34	Warm hat for cold weather that should cover your ears. We recommend wool or fleece.
Lightweight gloves	X	\$9-23	Lightweight, synthetic, fleece or wool glove. [Example: Outdoor Research PL Base Gloves]

Packs and Bags

Equipment	Rent	Buy	Notes
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Required Items

Backpack	\$35	New: \$350-400 Used: \$200-350	Our packs are large expedition models, with a volume of 80–110 liters. We recommend you rent one of these packs. 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. [Example: Osprey Aether 85L]
Small stuff sacks (1-2)	\$1	\$15-20	Small nylon or mesh sacks for organizing gear in your pack. These should be between 2- and 5-liter capacity.

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

Sleeping Gear

Equipment	Rent	Buy	Notes
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Required Items

Sleeping bag	\$30 (synthetic)	X	Despite popular belief, it gets very cold in the Southwest at night, often below freezing. For this course, we recommend a synthetic-fill or down-fill mummy bag with approximately 3 pounds of fill, rated to 0° or 25°F. Please note that down requires extra care in wet conditions. We rent 0° - 15° Mountain Hardwear Lamina synthetic bags.
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Compression sleeping bag stuff sack	\$6	X	Stuff sack that packs your sleeping bag or clothing into a smaller size than a regular stuff sack would. [Example: Granite Gear Air Compressor Series]
Heavy duty trash bags (1-2)	X	\$1	Heavy-duty, extra large, lawn-and-garden bags for lining and waterproofing backpacks and other bags. These are thicker and more durable than normal trash bags. We sell them as singles so you don't need to buy a whole box.
Sleeping pad	\$5 (foam)	\$80-160 (inflating)	Used for padding and insulation between your sleeping bag and the ground. Foam pads must be closed-cell and at least 3/8 inches thick. Inflatable pads are typically warmer and more comfortable, but can be vulnerable to getting holes. [Example: Thermarest ProLite].
Ground cloth	\$3	X	Nylon sheet to layer between your sleeping pad and the ground as you will be sleeping in tents without floors. Helps protect your gear from sand, dust, and dirt.

Optional Items

Sleeping pad stuff sack	\$1	X	Stuff sack to pack and protect your sleeping pad. Most helpful for foam sleeping pads, so you can lash it to the outside of your backpack.
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Our advice? A sleeping bag is another major purchase. If you don't already own one, consider using one of ours, gain some experience, then make an informed decision on your needs.

Miscellaneous Items

Equipment	Rent	Buy	Notes
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Required Items

Insulated mug	X	\$7-30	12- to 20-oz. insulated mug with a lid. A 16-oz. screw-top Nalgene water bottle can also function as a mug.
Bowl	X	\$8	Durable and able to handle hot liquids. A screw-on or snap-on lid is useful.
Spoon	X	\$1-17	Light and durable. Should fit inside bowl.
Water bottles (2-3)	X	\$9-12.50	Bring durable plastic bottles. 2-liter capacity minimum. Wide mouths are convenient.
Lip balm	X	\$3	Stick, cream, or tube type moisturizing balm with sun protection factor SPF 15 or greater.

Sunscreen	X	\$3-8	A 1- to 3-ounce tube with sun protection factor SPF 30 or greater.
Bandannas (1-2)	X	\$3	Useful for various purposes.
Sunglasses	X	\$15-35	Good-quality 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 or a pair of clip-on polarized shades.
Headlamp	X	\$20-50	Bring a durable and lightweight LED headlamp. Look for one between 200-300 lumens. Bring a set of spare batteries. [Examples: Black Diamond Spot or Cozmo, Petzl Tikka]
Batteries	X	\$1 each	We have individual AA and AAA batteries for sale.
Disposable lighter	X	\$2.39	Used for lighting your camp stove.
Toiletries	X	\$2-5	Toothbrush, toothpaste, comb, brush, skin lotion, tampons, etc. Travel or trial sizes are enough. We sell soap, toothpaste, toothbrushes and shampoo.
Watch	X	\$20-55	Durable and waterproof, with an alarm feature.
Pencil / Pen	X	\$0.50	For journaling and taking notes during classes. Bring more than one.
Notepad or Notebook	X	\$3.95-10	A small, lightweight notepad or notebook works well. [Example: Moleskine notebooks]
Town clothes (2 sets)	X	X	Bring two sets of comfortable clothing that you can travel in — jeans, shorts, t-shirt, sweatshirt, etc. Avoid bringing excess clothing, as storage space is limited.
Towel	No charge	X	We will provide you a towel for showering.
Optional Items			
Hydration system	X	\$9-40	Portable bag with drinking tube [Examples: Platypus or CamelBak]. We require having a backup water bottle in case the bag gets damaged in the backcountry.
Sunglass retainers	X	\$7.50	Chums or Croakies for keeping track of your glasses or sunglasses.

Pocket knife	X	X	A small, lightweight, knife. Simple and small Swiss Army knives and Leatherman are acceptable.
Book or e-reader	X	\$6-38	A small, lightweight paperback reading book or a black & white e-Reader without cellular connectivity. [Examples: Kindle Paperwhite or Nook eReaders]. Bring a protective case. Please note that tablets (ie. iPads, Kindle Fire) are not allowed on NOLS courses.
Camera	X	\$12-90	GoPros and lightweight digital or 35mm cameras are acceptable; bring a protective case. A waterproof container is recommended. Avoid elaborate lenses and heavy SLRs. (Please note: you may not bring your smartphone or tablet to use as a digital camera.) Bring extra batteries and memory cards.
Camp chair	X	\$35-50	A lightweight, compact chair for using in camp. [Examples: Crazy Creek or Thermarest Trekker]
Prescription glasses & contact lenses (1-2 pairs)	X	X	Bring at least one spare pair of glasses or lenses. Contact lens wearers should also bring a pair of glasses as backup. Prescription sunglasses are a nice item to have in reserve.
Trekking poles (1-2)	X	\$80	Used for support and balance weight while hiking. Should be sturdy and adjustable.
Coffee	X	\$1 per Starbucks VIA / \$7 per ½ lb of grounds	Coffee is not in the NOLS ration, so we recommend bringing your own or buying from us if you want to drink coffee in the backcountry.
Coffee filter	X	\$30	Single cup pour over filter, coffee sock, or other lightweight system to make coffee on your course.

Our advice? Keep the toiletries, headlamp and other items to small sizes. We work to keep our pack weight as low as possible, but our packs are still heavy. Saving every ounce is essential! Also, all of the items in the optional section are not necessary for you to have a successful course. Bring any that you may already own or feel like you might want during your time in the backcountry.

Footwear

Equipment	Rent	Buy	Notes
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Required Items			
Hiking boots	X	X	Durable hiking boots; all-leather or combination of leather and synthetic. Must have good support in the heel and ankle, and be sturdy enough to carry 45 - 50+ pounds of gear. We recommend taking the time to break in new boots before your course in order to prevent blisters. NOLS Southwest does not rent or sell hiking boots. See the “recommended boots” information at the bottom of this document.
Wool or synthetic socks (2-3 pairs)	X	\$13-20	Mid to heavyweight. You may prefer socks of different thickness for different activities (ex. for travel during the day and wearing at night in your sleeping bag). Smartwool, Darn Tough and/or Wigwam are reputable brands.
Camp shoes	X	\$30	Comfortable shoes to change into in camp. Must be closed-toe. Lightweight and quick-drying running shoes or Crocs (without holes) work well. [Example: Brooks Cascadia]
Optional Items			
Gaiters	X	\$20-40	Nylon boot attachment that protects the ankle and shins from snow, dirt, and prickly plants. Must be durable and large enough to fit over boots. [Example: Outdoor Research Crocodile Gaiters]
Insoles	X	X	To assure your comfort in hiking boots an aftermarket insole can provide arch support, stabilizes your foot and heel, add cushion and help volume adjustment. [Examples: Spenco Polysorb®, Superfeet, Montrail Enduro Sole Insoles]
Liner socks (2-3 pairs)	X	\$8	Lightweight wool or synthetic “wicking” socks. You will need at least two pairs if you are using a liner sock/wool sock combination in your hiking boots.
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 at least a liner and a wool sock, we won't let you use them. If you have any doubts about boots, give us a call.			

Shared Group Equipment—NOLS will supply

All items listed below are provided by NOLS and shared among all expedition members. Group equipment is included as part of the course tuition; however, students will be charged for any lost or damaged group equipment.

Tents
Compasses
Trowels
Stoves, fuel bottles and fuel
Maps
Bear spray
GPS
Personal Locator Beacons (PLBs)
Repair kits
Reference books
Cooking gear/spice kits
Soap and hand sanitizer
Water purification

First Aid:

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

Recommended Boots

Note that NOLS Southwest does not rent or sell hiking boots. NOLS has been outfitting students with boots for many years and our priorities have remained the same: we want you to have boots that provide adequate protection for your feet, are durable enough to withstand extended rugged wear, and provide reasonable comfort. Many boots available on the market do not meet these criteria, and a boot that is good for weekend day-hiking use may not be a good boot for your NOLS course.

Medium-weight, off-trail backpacking or light mountaineering boots work best. They provide good support for off-trail hiking with heavy packs, and usually require less break-in time than heavyweight mountaineering boots. Here are some features to look for:

- Constructed from full-grain, one-piece leather upper or a combination of nylon, Gore-Tex, and leather.
- A sole that provides good traction, like Vibram® or other lugged sole.
- 1/2- to 3/4-length shank or full poly mid-sole stiffener within the sole to provide foot support and protection.
- Ankle support! Trail running shoes and below-the-ankle hiking boots are not recommended.

- Comfortable fit with your preferred hiking socks. Boots 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.

Examples of Acceptable Boots*

- Asolo: TPS 520 GV, TPS 535, TPS Equalon GV EVO
- La Sportiva: Nucleo High, Blade GTX
- Scarpa: Zanskar GTX, Hunza GTX, SL ACTIV, Mistral GTX
- Vasque: St. Elias GTX, Summit GTX, Sundowner GTX

*Please note that boot manufacturers often rename their product line. Visit the manufacturer's website, or contact us if you have questions.