

Equipment List

Southwest Outdoor Educator

Welcome to NOLS Southwest! We look forward to having you with us. We have designed this list to help you decide what equipment you will need for your course. Please read the following information carefully before making any equipment choices.

Equipment Selection

Equipment selection and care is an essential wilderness skill, and there is a bewildering variety of gear on today's market. We urge you to do some research before buying and to be careful about making expensive pre-course purchases. Because you will have a better understanding of your equipment preferences after your course, we recommend renting from NOLS rather than purchasing expensive gear in advance. Gear rental will provide you with the opportunity to test specific items and will help you make more informed purchases for your future outdoor pursuits after NOLS.

You are welcome to bring any gear on this list that you already own. Please try to match your selections as closely as possible to the items described in the following list. Your instructors will inspect all of the gear you bring to determine if it is suitable for your course's specific route and anticipated weather. If an item is not approved, you can leave it with your luggage in our storage lockers. You may be required to rent or purchase gear from our outfitting department to supplement what you brought with you. **Your specific instructor team, recent weather and route will ultimately determine which gear is best for your expedition.**

In an effort to provide more of a visual image and to lighten your pack weight, we have listed an example piece of gear and its associated weight for specific items. You can check these examples out on the internet or at a local gear store to see what they look like. These specific brands are not required, they are just examples. If you are going to purchase items before your course, think carefully about weight and durability!

Gear Purchase

Students will have the opportunity to purchase new and used equipment from NOLS Southwest. We offer substantial discounts for purchasing used equipment and the rental fee for gear used on your course will be applied toward the purchase price. A cautionary note: a number of additional gear purchases may raise the total outfitting bill above the equipment deposit.

If you wish to buy gear before your course, consider using one of our Preferred Retailers. These are retail stores that maintain close ties to NOLS. The staff at these stores is familiar with NOLS and has a good idea of the equipment you need for your course. Please ask the NOLS admission office about Preferred Retailers in your area or visit our website at www.nols.edu/about/partnerships/retailers.

Equipment Fees

The NOLS Southwest outfitting department is capable of providing virtually all of the equipment needed for your course, with the exception of hiking boots. To cover the cost of your equipment purchases and rentals you have been charged an equipment deposit in addition to the course tuition. (See your account statement for the amount.) The equipment deposit approximates the cost of what the average student on this course spends on gear purchases and rentals. Additional charges will be incurred for any equipment that is lost or damaged. You will be billed for any charges that exceed your equipment deposit or refunded any balance approximately 2-4 weeks after the end of your course.

Equipment List

The following list describes the equipment necessary for your course and its availability at NOLS Southwest. Please pay careful attention to those items we do not provide, and/or those that are for purchase only— with no option to rent. **Please note that rental prices listed are per course. Prices are subject to change without notice.**

The availability of each item is indicated as follows:

Purchase Only — The item is available from NOLS, but for PURCHASE ONLY.

Rental Only — The item is available at NOLS, but for RENTAL ONLY**

Must Bring — The item is NOT AVAILABLE from NOLS; must bring from home.

*** Rental Only items have the opportunity to be purchased at the end of your course if you are interested. The rental price is then applied towards the purchase price.*



Important: If you have not spent much time in the outdoors and have little experience with outdoor gear, this list may seem overwhelming at first. Please don't stress! Just do your best to find items that match most closely those described. Do some research on the web or bring this list to your local gear store for help. You are also welcome to call us at NOLS Southwest (520-749-0955); we love chatting with students before courses begin!

Upper Body Layers

NOLS uses a layering system where different combinations of clothing are worn to achieve optimum body temperature control. The upper body garments listed here are either synthetic garments which retain their insulating properties even when wet, or nylon or Gore-Tex® layers which help prevent heat loss by repelling wind, rain, and snow. You will need three insulating layers plus a wind layer and a rain layer. All must fit comfortably over each other so they can all be worn at the same time, if necessary. One of these layers must be a synthetic-filled (puffy) jacket with a zipper or a heavy fleece made of Polartec® 300 or equivalent. Synthetic t-shirts are necessary for your backpacking section, but you may bring cotton t-shirts for the climbing section of your course.

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Primary Insulating Layer (Mid-Weight Top)	Purchase Only	\$40 - \$55	1	1 mid-weight underwear top made of wool, polypropylene or Capilene®. [Example: Patagonia Capliene 2 Lightweight Crew, 5.6oz]	
Secondary Insulating Layer (Expedition Weight Top)	Purchase Only	\$80 - \$150	1	Polyester fleece pullover/expedition weight top of Polartec® 100 or 200, or a wool sweater. DO NOT bring an expensive "favorite" sweater; this item will receive extensive wear. [Example: Patagonia R1 Hoody, 11.5 oz]	
Top Insulating Layer (Fleece Jacket)	\$20	Rental Only	1	Optional. A heavyweight full-length zip fleece jacket of Polartec® 300 or equivalent weight. All other layers must be able to be fit comfortably under this top layer. You must bring either this fleece top layer or the synthetic puffy top layer listed below. [Example: Patagonia R2 jacket, 13.1oz]	
Top Insulating Layer (Synthetic "puffy" Jacket)	\$30	\$145 - \$190	1	Lighter weight and warmer than comparable fleece jackets! A warm synthetic filled puffy jacket is recommended for people who get cold easily. We recommend synthetic. Down can be used, but requires extra care in wet conditions. [Example: Mountain Hardwear Compressor Jacket, 16oz]	
Wind Shirt / Jacket	\$20	\$60 - \$80	1	A lightweight, breathable, nylon wind shell either pullover or full-zip style. Must be large enough to fit over all of your insulating layers. Hooded wind jackets are strongly recommended. Does not need to be waterproof. [Example: Patagonia Houdini Jacket, 3.7oz]	
T-Shirts	Purchase Only	\$20 - \$40	2	1 synthetic shirt for hiking, and 1-2 cotton t-shirts for climbing. We highly recommend polyester or Capilene® for hiking because it dries much more quickly than cotton and can be incorporated into a layering system. Consider a men's polyester button up dress shirt for a hiking shirt, inexpensive at a thrift store and provides great sun protection! [Example: Patagonia Capilene 1 Silk-weight T-Shirt, 3.4 oz]	

Upper Body Layers (Continued)

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Sport Bras	Purchase Only	\$35	1	We stock Patagonia synthetic sports bras.	
Rain Jacket	Purchase Only	\$120 - \$150	1	Bring a lightweight (less than 16oz), waterproof, breathable rain jacket. Both coated nylon and breathable fabrics such as Gore-Tex® are acceptable. [Example: Marmot Precip Jacket, 13oz]	

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 synthetic insulating layers, plus a wind layer. All must fit comfortably over each other so that they can be worn at the same time.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Primary Insulating Layer (Mid-Weight bottoms)	Purchase Only	\$40 - \$50	1 pair	This insulating layer should be made of polypropylene, wool or Capilene®. Cotton and cotton blends are not acceptable. [Example: Patagonia Capilene 2 Lightweight Bottoms, 5.7 oz]	
Secondary Insulating Layer (Fleece Expedition-Weight Pants or Synthetic Puffy Pants)	\$25	\$53 - \$140	1 pair	Synthetic puffy insulation or Polartec® 200 or equivalent. Side zippers (full length, or knee high) make it easier to put pants on over hiking boots. We sell puffy pants and rent fleece plants. [Examples: Patagonia Capilene 4 Expedition Weight Bottoms, 7.1 oz or Montbell U.L. Thermawrap Pants 10.2 oz.]	
Wind Pants/Rain Pants	\$30	\$65 - \$100	1 pair	Breathable nylon wind pants or breathable rain pants that are roomy enough to fit over all lower body garments. Zippered legs will help you slip your pants on over boots. Lightweight running pants are not durable enough. 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.	
Shorts	Purchase Only	\$33 - \$45	1 pair	Loose fitting and quick drying nylon athletic or river shorts work well for your backpacking section. Cotton shorts will only be acceptable for your climbing section. [Example: Patagonia Baggies, 8.1 oz]	
Underwear	Purchase Only	\$20 - \$35	2-4 pair	Silk / synthetic or none. We recommend that men go without underwear, and just use nylon shorts with liners. Women should go with what's comfortable. We stock Patagonia silk-weight briefs for women and boxers and briefs for men.	

Our advice? Bring the synthetic or wool long johns and fleece or puffy pants that you think might work. We'll advise you on the best combination for your course.

Head, Neck & Hand Layers					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sun Hat, Baseball Cap or Visor	Purchase Only	\$20	1	A baseball hat, sun hat or visor to protect face and ears from the sun. We stock NOLS Southwest baseball caps and visors.	
Wool/Fleece Hat	Purchase Only	\$15 - \$30	1	A warm hat made of wool or fleece.	
Lightweight Gloves	Purchase Only	\$9 - \$15	1 pair	Wool or fleece are acceptable. [Example: Outdoor Research PL glove liners, 1.4 oz]	

Packs & Bags					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
We carry the Osprey Escalante, NOLS Deuter and Golite Odyssey backpacks.					
Backpack	\$60	New: \$300 - \$350 Used: \$200- \$300	1	<p>Various internal frame backpacks are available to rent from NOLS. Our packs are large, expedition models. If you are planning to purchase a backpack in advance, or bring your own, it must have a volume of 5500 cubic inches. A compression stuff sack is required for your sleeping bag.</p> <p>Recommended packs: Golite Odyssey (3.5 lbs , Osprey Aether series, NOLS Deuter pack (4+ lbs), or other packs of similar quality and capacity. The backpack itself should weigh no more than 4-5 lbs.</p> <p>If you do not already own a backpack, we recommend you rent one from us. You can decide after your course what size and type of backpack you wish to purchase. If you bring your own backpack your instructors will examine it to determine its suitability.</p>	
Climbing “Day” Pack	\$30	\$170	1	Used for the climbing section. Needs to be big enough for personal things and group climbing gear—minimum of 2750 cubic in. A school book-bag pack is not acceptable.	
Small Stuff Sacks	\$4	\$15 - 20	2-3	Small nylon or mesh sacks with drawstrings for organizing items in your pack.	
Big Duffel Bag	\$20	\$30 - \$40	1	A large-sized zippered nylon bag (4000-8000 cu. inches) is used for packing/storing all your gear on the climbing section.	

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 based on your needs.

Sleeping Gear

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sleeping Bag	\$60	Available new and used for \$100 - \$270	1	Despite popular belief, it gets very cold in the Southwest at night, often below freezing. We recommend synthetic-filled bags (Quallofil®, Hollofil®, Polarguard®, etc.). These bags are very durable and perform well in the variety of conditions we encounter. A bag with a 0°-15° F temperature rating is required. Bags lose loft and subsequent warmth over the years (at least 10° of warmth over the course of a year). We rent 0° - 15° Mountain Hardwear Lamina bags and have the 15° MontBell Down Stretch Hugger bags for sale. Down bags are far lighter weight and bulk while still providing excellent warmth. They do require more care in the field but are acceptable for your course.	
Compression Sleeping Bag Stuff Sack	\$20	\$20 - \$55	1	Compression stuff sacks are recommended for use with internal frame packs. These bags have straps attached to them for compressing sleeping bags while packing. Look for lighter weight sil-nylon versions if you need one. [Example: Granite Gear Air Compressor, 2.2 oz]	
Plastic Trash Bags	Purchase Only	\$.75 - \$1.00	2-3	2-3 heavy-duty trash compactor bags (33 gallon) to help waterproof your sleeping bag stuff sack and backpack. We sell them as singles so you don't need to buy a huge box and fly with it!	
Sleeping Pad	\$12	\$8 - \$12 (ensolite) \$60 - \$70 (Therm-A-Rest®)	1	A 3/4-length closed cell foam or "self inflating" pad to insulate and pad between the ground and your sleeping bag. Self-inflating Therm-A-Rest® type pads are acceptable if you bring a patch repair kit. NOLS does not rent self-inflating pads, only foam pads. [Example: Therm-a-rest Trail Lite Regular, 2.0 lbs]	
Sleeping Pad Stuff Sack	\$4	\$8 - \$16	1	If you are planning to rent a foam pad from us, then plan to rent a stuff sack, also. This helps make it easier to pack and cuts down on wear and tear.	
Ground Cloth	\$8	\$12 - \$20	1	A lightweight 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 use ours, gain some experience, then make an informed decision on your future needs.

Climbing Equipment

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Helmet	No Charge	-	1	You may bring your own UIAA approved helmet or you can use one from NOLS for free.	
Rock Shoes	\$38	New & used \$60 - \$130	1 pair	Shoes should be tight fitting ("toes just hit the end"), but loose enough that they can be worn for up to five hours at a time.	

Climbing Gear (Continued)

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Climbing Shorts	Purchase Only	\$35 - \$45	1 pair	Cotton shorts are appropriate for your climbing section. Longer shorts are best to wear with a harness. [Example: Prana Mojo shorts]	
Chalk Bag	Purchase Only	\$20 - \$25	1	Optional. Chalk bags hold chalk that is used to dry hands while climbing.	
Chalk Ball	Purchase Only	\$4	1	Optional. Gymnastic chalk enclosed in a tight mesh sock. Used to dry hands while climbing.	
Harness	\$32	\$75	1	We have harnesses to rent, but if you own one, bring it along.	
Cotton Climbing Pants	Must Bring	Must Bring	1	Optional. Comfortable cotton or polypro pants to protect your legs while climbing.	

Our advice? If you own a harness, helmet, chalk bag and pair of shoes, bring them along. If your instructors approve, you can use them. We will use the school's climbing protection, belay devices, slings, carabiners and ropes.

Miscellaneous Items

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Insulated Mug	Purchase Only	\$5 - \$9	1	12 to 20 oz. insulated mugs with lids are preferred.	
Bowl	Purchase Only	\$4 - \$8	1	A lightweight bowl with a snap-on or screw on lid. Tupperware works well.	
Spoon	Purchase Only	\$2	1	Lexan spoons are light, durable and popular.	
Water Bottles	Purchase Only	\$7 - \$11	2	Wide mouth quart- or liter-size plastic bottles with a total capacity of 2 liters. [Example: 1L Nalgene Bottle]	
Hydration System	Purchase Only	\$13 - \$40	1	Very handy and popular. We carry Platypus bottles and MSR Hydromedary bags. (1 – 3L)	
Lip Balm	Purchase Only	\$3	1	Stick, cream, or tube type moisturizing balm with sun protection factor SPF 15 or greater.	
Sunscreen	Purchase Only	\$3 - \$9	1	An 8- to 10-ounce tube with sun protection factor SPF 15 or greater.	
Bandanas	Purchase Only	\$3	2 or 3	A few of these are always handy.	
Sunglass Retainers	Purchase Only	\$6	1	Optional. Chums® or Croakies® for keeping track of your glasses or sunglasses.	
Sunglasses	Purchase Only	\$40 - \$75	1 pair	Lenses should block 100% ultraviolet and 95% infrared light. We carry various brands and styles.	
Headlamp	Purchase Only	\$25 - \$50	1	Durable and lightweight. LED headlamps are popular. Bring spare batteries. [Example: Black Diamond Storm headlamp, 3.9 oz.]	
Batteries	Purchase Only	\$.75 each	1 - 2 sets	We have AA and AAA batteries for sale.	

Miscellaneous Items (Continued)

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Disposable Lighters	Purchase Only	\$1.50	1	Used for lighting your camp stove.	
Watch	Purchase Only	\$40 - \$60	1	A watch with an alarm is a necessary item.	
Toilet Articles	Purchase Only	\$1.50 - \$5	1 of each	Toothbrush, toothpaste, comb, brush, skin lotion, tampons, etc. Travel or trial sizes are enough. We carry soap, toothpaste, toothbrushes and shampoo.	
Notepad and Pencil/Pen	Purchase Only	\$4-10/\$.50	1	A small, lightweight pad is necessary for taking notes.	
Town Clothes	Must Bring	Must Bring	2 sets	Bring two sets of comfortable clothing that you can travel in — jeans, shorts, t-shirt, rugby, etc. Avoid bringing excess clothing, as storage space is limited.	
Towel	No Charge	-	1	We will provide you a towel for showering with after your course and in between sections.	

Our advice? Keep the toiletries, pocketknife and camera gear 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!

Optional Items

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Liner Socks	Purchase Only	\$7	1 - 2 pairs	Lightweight wool, polypropylene or Capilene® "wick dry" socks. You will need at least two pair if you are using the liner sock/wool sock combination in your hiking boots.	
Pocket Knife	Purchase Only	\$40 - \$60	1	One small, lightweight knife is sufficient; simple Swiss Army knives are best.	
Vitamins	Must Bring	Must Bring		Not necessary, but a small quantity of multi-vitamins is popular among staff and students for a course of this length.	
Insoles	Must Bring	Must Bring	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.	
Book	Purchase Only	\$6 - \$38	1 or 2	A small, lightweight paperback reading book.	
Water Treatment	No Charge	NA	1	NOLS supplies Aqua Mira for backcountry water purification. Aqua Mira is a chlorine dioxide based treatment that is iodine and chlorine free. However, if you have sensitivity to this treatment you may need to bring your own water filter such as the PUR Scout or Hiker, or the Sweetwater Guardian.	

Optional Items (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Camera	Must Bring	Must Bring	1	Lightweight, 35 mm digital compact cameras are sufficient; bring a protective case. Avoid heavy lenses and elaborate set-ups on the backpacking section.	
Backpacker's Camp Chair	Purchase Only	\$35 - \$44	1	Crazy Creek or one with Therm-A-Rest fitting. May mean carrying a little extra weight, but most students and instructors consider it a worthwhile investment.	
Prescription Glasses And Contact Lenses	Must Bring	Must Bring	1-2 pair	Bring a spare pair of glasses or lenses. Contact lens wearers should also bring a pair of glasses as backup. Prescription sunglasses are nice to have.	
Trekking Poles	Purchase Only	\$65 - \$70/pair	1 pair	If you like to use a trekking pole while you hike. It should be a sturdy 2-3 section pole that packs easily.	
Thermos	Purchase Only	\$25 - \$30	1	Great for keeping morning drinks warm during your basecamp section.	

Footwear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Hiking Boots	Must Bring	Must Bring	1 pair	Sturdy medium weight backpacking boots with good ankle support and proper fit are critical for hiking on uneven terrain with heavy expedition packs. See recommended boots at the end of this document.	
Socks	Purchase Only	\$8 - \$12	3-4 pair	3-4 pair, crew length. Socks must be heavy wool or heavy wool/synthetic blend. Cotton/wool blend socks are not appropriate. Additionally, a few pairs of shorter 1/4 length socks are nice for the climbing section.	
Gaiters	Purchase Only	\$45	1 pair	Gaiters keep dirt and other debris from entering the boot. These are a critical part of your footwear system. [Example: Outdoor Research Crocodile Gaiters]	
Camp Shoes	Must Bring	Must Bring	1 pair	Lightweight running, tennis or cross-training shoes, in good condition, to wear around camp. Open-toed "river" or "mountain" sandals are not acceptable for the backcountry.	

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, please give us a call.

Recommended Boots

Please note that NOLS Southwest does not rent or sell hiking boots. Medium-weight, off-trail backpacking/light mountaineering boots work best. This type of boot is constructed with a full grain leather upper and typically has a Vibram® rubber sole. Some models utilize an injection molded, composite rubber sole with a randed welt to bond the leather upper to the sole. Both types of sole are acceptable. These boots are designed for extended backpacking, provide good support for off-trail hiking with 40 – 60 pound packs, and usually require less break-in time than heavyweight mountaineering boots.

The following list is not exhaustive and is to be used for suggestions only. The boots listed here should help define what types are acceptable for your course. It is fine to substitute a similar boot for one listed here provided the boot that you bring is a good quality leather model designed for extended backpacking expeditions with heavy packs.

EXAMPLES OF ACCEPTABLE BOOTS*

Examples Of Acceptable Boots*

Asolo: TPS 520 GV, TPS 535

Lowa: Tibet GTX, Banff, Baffin Pro

La Sportiva: Thunder II GTX, Cypress GTX

Montrail: Feather Peak GTX

Scarpa: Barun GTX, Mustang GTX

Vasque: Wasatch GTX, Summit GTX

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

Group Equipment

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 & Shelters	• Maps & Compass	• GPS Units
• Camp Stoves	• Reference Books	• Binoculars
• Fuel and Fuel Bottles	• First Aid Kits	• Equipment Repair Kits
• Trowels or Shovels	• Cooking Gear	• Water Purification