

# Equipment List

## Southwest Outdoor Educator Course

**Welcome to NOLS Southwest!** 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 future purchases.

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. Your instructors will inspect any 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 asked to rent or purchase gear from our outfitting department to supplement what you brought with you.

**Your instructor team, recent weather and route will ultimately determine which gear is best for your expedition.**

### 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](http://www.nols.edu/about/partnerships/retailers).

When purchasing gear, we encourage you to consider the weight of the equipment. Remember, you will be carrying everything you need to be comfortable in the backcountry on your back, so lightweight gear is a smart choice!

### 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. **Rental prices listed are per 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 prices are subject to change.**

**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!

**The availability of each item is indicated as follows:**

**Available at NOLS** — The item is available from NOLS, but for PURCHASE ONLY.

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

**Rental Only** — The item is available for RENT from NOLS, but can be purchased after your course, (the rental price is applied to the final purchase price)

## 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. If you tend to get cold easily, think about adding a fleece or synthetic vest to the other three layers. With the exception of one T-shirt, cotton or cotton blends are not acceptable. Synthetic t-shirts are ideal—silk or polyester.

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Primary Insulating Layer (Mid-Weight Top)	Available at NOLS	\$43	1	1 mid-weight underwear top made of wool, polypropylene or Capilene®.	
Secondary Insulating Layer (Expedition Weight Top)	Available at NOLS	\$67-\$76	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.	
Top Insulating Layer (Fleece Jacket)	\$20	\$50	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 will need either a fleece or synthetic top layer (see below).	
Top Insulating Layer (Synthetic “puffy” Jacket)	\$25	\$180	1	Lighter weight and warmer than a comparable fleece jacket! A warm synthetic filled jacket is recommended for people who get cold easily. We recommend synthetic. Down can be used, but requires extra care in wet conditions. Look at the Mont-bell thermawrap series or Patagonia micro puff series of insulating layers.	
Fleece or Synthetic Vest	\$15	Rental Only	1 (optional)	Optional. A polyester fleece vest of Polartec® 200 or a synthetic filled vest (a vest is not a substitute for a fleece pullover or any other layer). This is an additional layer for individuals who find that they get cold easily.	
Wind Shirt / Jacket	\$20	\$50-\$100	1	A lightweight, breathable, nylon wind shell either pullover or parka 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. Mont-bell, Golite and Patagonia all have lightweight options that are perfect for your course.	
T-Shirts	Available at NOLS	\$20- \$34	2	1 synthetic shirt for hiking, and 1 cotton shirt for climbing. Cotton is cooler on warm hiking days but is not considered an insulating layer. We highly recommend Polyester/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!	



### Upper Body Layers (Continued)

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Sport Bras	Available at NOLS	\$38	1	We stock Patagonia synthetic sports bras.	
Rain Jacket	Available at NOLS	\$100	1	A roomy waterproof jacket with a hood. Both coated nylon and breathable fabrics such as Gore-Tex® are acceptable. Should not weigh more than 16 oz! We carry Golite, Mtn Hardware and Patagonia.	

Our advice? Despite its reputation, **the desert can get very cold** and courses often encounter rain or even snow. Bring the fleece jackets and other layers you think might work. We'll advise you on the best combination for your course, the season and area.

### Lower Body Clothing

You will need at least 2 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)	Available at NOLS	\$42	1 pair	This insulating layer should be made of polypropylene, wool or Capilene®. Cotton and cotton blends are not acceptable.	
Secondary Insulating Layer (Fleece Pants/ Expedition-Weight Bottoms)	\$20	\$53-\$60	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 from Mont-Bell and Mountain Hardware.	
Wind Pants	\$25	\$65	1 pair	Breathable nylon wind 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.	
Nylon Shorts	Available at NOLS	\$37-\$45	1 pair	Loose fitting nylon athletic or river shorts work well. Cotton shorts make a poor choice because they take too long to dry. We stock Patagonia and Prana shorts.	
Underwear	Available at NOLS	\$18-\$30	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 or exercise pants 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	Available at NOLS	\$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	Available at NOLS	\$20-\$32	1	A warm hat made of wool or fleece.	
Balaclava	\$4	Rental Only	1	Balaclavas are full head and neck coverings that have an opening for the face. Usually made out of Polartec® 100 or 200 fleece.	
Lightweight Gloves	Available at NOLS	\$8-\$15	1 pair	Ragg wool or fleece are acceptable.	

Packs					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
We carry NOLS Lowe packs, NOLS Deuter packs and Dana Design Astralplanes.					
Backpack	\$80	New: \$350- \$490  Used: \$200- \$350	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 pack in advance, it must have a volume of 4500-5500 cubic inches. A compression stuff sack is required for your sleeping bag.</p> <p>Recommended packs: NOLS/Deuter Pack (available through NOLS Mail Order). Osprey Aether, or other packs of similar quality and capacity.</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>	
Day Pack	\$45	\$160	1	Used for the climbing section. Needs to be big enough for personal things and group climbing gear—minimum of 2500 cubic in. A school book-bag pack is too small.	
Small Zip (Duffel) Bag	\$5	\$13	1	1 lightweight medium-sized zippered nylon bag (approx. 12" x 24") with nylon handles is used as part of our packing system.	
Small Stuff Sacks (Ditty Bags)	\$1 each	\$3-\$10	Optional	Small nylon or mesh sacks with drawstrings 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 based on your needs.



### Sleeping Gear

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Sleeping Bag	\$60	Available new and used for \$100-\$180	1	Despite popular belief, <b>it gets very cold in the Southwest at night.</b> We recommend synthetic-filled bags (Quallofil®, Hollofil®, Polarguard®, etc.), which are very durable and perform well in the variety of conditions we encounter. A bag with a 5°-15° F temperature rating is required. Bags lose loft and subsequent warmth over the years. A bag can lose at least 10° of warmth over the course of a year. We stock Mountain Hardwear® 5°-15° bags. Down bags are of lighter weight and still provide excellent warmth. They do require more care in the field but are acceptable for your course.	
Compression Sleeping Bag Stuff Sack	\$12-\$20	\$20 - \$55	1	Compression stuff sacks are recommended for use with internal frame packs. These sacks have straps attached to them to compress the sleeping bag for efficient packing.	
Plastic Trash Bags	Available at NOLS	\$.50 - \$.75	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	\$5	\$8-\$12 (ensolite) \$60 (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.	
Sleeping Pad Stuff Sack	\$4	\$8-\$10	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	\$4	\$8-\$12	1	A 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	NA	1	You may bring your own UIAA approved helmet.	
Rock Shoes	\$45	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. If you rent shoes from NOLS you will be required to wear sock liners with them.	
Harness	\$20	\$70	1	We have harnesses to rent, but if you own one, bring it along.	
Cotton Climbing Pants	Must Bring	Must Bring	1	Optional. Loose fitting pants to protect your legs while climbing.	



Climbing Gear (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Cotton Shorts	Available at NOLS	\$37 - \$45	1 pair	Cotton shorts are appropriate for your climbing section. Longer shorts are best to wear with a harness. We have a limited stock of Prana® sportswear.	
Chalk Bag	Available at NOLS	\$18	1	Optional. Chalk bags hold chalk that is used to dry hands while climbing.	
Chalk Ball	Available at NOLS	\$4	1	Optional. Gymnastic chalk enclosed in a tight mesh sock. Used to dry hands 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	Available at NOLS	\$6-\$9	1	12 to 20 oz.insulated mugs with lids are preferred.	
Bowl	Available at NOLS	\$3-\$5	1	A bowl with a snap-on lid is also handy. Tupperware is best.	
Spoon	Available at NOLS	\$1	1	Lexan spoons are light, durable and popular.	
Water Bottles	Available at NOLS	\$8-\$10	2	Wide mouth quart- or liter-size plastic bottles with a total capacity of 2 liters.	
Hydration System	Available at NOLS	\$32-\$60	1	Very handy and popular. We carry a variety of Camelbak® packs.	
Lip Balm	Available at NOLS	\$2	1	Stick, cream, or tube type moisturizing balm with sun protection factor SPF 15 or greater	
Sunscreen	Available at NOLS	\$3-\$9	1	An 8- to 10-ounce tube with sun protection factor SPF 15 or greater.	
Bandannas	Available at NOLS	\$3	2 or 3	A few of these are always handy.	
Sunglass Retainers	Available at NOLS	\$6	1	Optional. Chums® or Croakies® for keeping track of your glasses or sunglasses	
Sunglasses	Available at NOLS	\$40-\$100	1 pair	Lenses should block 100% ultraviolet and 95% infrared light. We carry various brands and styles.	
Headlamp	Available at NOLS	\$27-40	1	Durable and lightweight. LED head lamps are popular. Bring spare batteries. We carry Tikka®, TikkaPlus®, and TikkaXP® headlamps.	
Batteries	Available at NOLS	\$.75 each	2 sets	We have AA and AAA batteries for sale.	
Disposable Lighters	Available at NOLS	\$1.50	2	Used for lighting your camp stove.	



Miscellaneous Items (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Watch	Available at NOLS	\$20-\$50	1	A watch with an alarm is a necessary item.	
Toilet Articles	Available at NOLS	\$.50 - \$2	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	Available at NOLS	\$4/\$.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	Not Available	1	We will provide you a towel for showering with after your course.	
Our advice? Keep the toiletries, pocketknife and camera gear to small sizes. We work to keep our pack weight as low as possible.					

Optional Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Liner Socks	Available at NOLS	\$7	2 or 3 pair	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	Available at NOLS	\$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	Available at NOLS	\$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. However, if you are sensitive to iodine or chlorine you may need to bring your own water filter such as the PUR Scout or Hiker, or the Sweetwater Guardian.	
Camera	Available at NOLS	\$10	1	Lightweight, 35 mm compact cameras are sufficient; bring a protective case. Avoid heavy lenses and elaborate set-ups. We sell disposable cameras.	



Optional Items (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Backpacker's Camp Chair	Available at NOLS	\$35	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	\$15/pole	Rental Only	1 or 2	If you like to use a ski pole while you hike. It should be a sturdy 2-3 section pole that packs easily.	
Thermos	Purchase Only	\$24-\$28	1	Great for keeping morning drinks warm.	

Footwear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Hiking Boots	Must Bring	Must Bring	1 pair	Sturdy light 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	Available at NOLS	\$12-\$14	3-4 pair	3-4 pair, short length. Socks must be heavy rag wool or heavy wool/synthetic blend. Cotton/wool blend socks are not appropriate.	
Gaiters	Available at NOLS	\$29-\$36	1 pair	Gaiters keep dirt and other debris from entering the boot. These are a critical part of your footwear system. Outdoor Research, Black Diamond, Granite Gear, Rocky Mtn High, Powder Line, and Mountain Hardwear all manufacture suitable gaiters.	
Camp Shoes	Must Bring	Must Bring	1 pair	Lightweight running, tennis or cross-training shoes, in good condition, to wear around camp. Crocs are a great option, which we sell at NOLS SW. 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. Call with questions!



## 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 heavy 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\*

Asolo: TPS 520 GV, TPS 535

Lowa: Tahoe GTX, Tibet GTX, Banff

Garment: Dakota, Expedition, Montana

La Sportiva: Latok Trk, Thunder GTX

Montrail: Blue Ridge, Torre, Traverse

Raichle: Mt Peak, Mt Trail

Scarpa: Delta M3, SL M3

Technica: Galaad NB, Galaad SD GTX

Vasque: Zephyr, Luna, Wasatch GTX, Sundowner 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