

Equipment List

Sonoran Year

- Fall Semester in the Southwest -

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 take the time to read the following information carefully before making any equipment choices.

Equipment Selection

Equipment selection and care is an essential wilderness skill. There is a bewildering variety of equipment on today's market. We urge you to do some research before buying and to be careful about lots of expensive pre-course purchases. Because you will have a better understanding of your equipment preferences after your NOLS 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.

You are welcome to bring any gear on our equipment 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 asked 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 try and give more of a visual image and to lighten your pack weight, we have listed an example piece of gear and their associated weights for specific items. You can check these examples out on the internet or at the 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 about weight and durability!

Gear Purchase

Throughout the course, students have the opportunity to purchase new and used equipment. NOLS offers 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 from us, you have been charged an equipment deposit in addition to the course tuition. (See your account statement for the amount.) The equipment deposit equals the cost of what the average student spends on gear purchases and rental items throughout the duration of this semester. 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.

Please note that the rental prices listed are per course.

Equipment List

The following list describes the equipment necessary for your course and the availability of that equipment 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 without notice.**



The availability of each item is indicated as follows:

Purchase Only — 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 only available for RENT from NOLS.

Important Note:

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 to those described. Do some gear research on online or bring this list to your local gear store for help. Please also do not hesitate to call us at NOLS Southwest (520) 749-0955, we love hearing from students before courses start!

Upper Body Clothing

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 heavy fleece made of Polartec® 300 or equivalent, or a synthetic-filled jacket with a zipper. 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 or silk t-shirts are ideal.

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Primary Insulating Layer (Mid-Weight Top)	Purchase Only	\$43	1	Mid-weight underwear top made of wool, polypropylene or Capilene®. [Patagonia Capliene 1 Crew, 5.7oz or Patagonia Capilene 2 Zip Neck, 6oz]	
Secondary Insulating Layer (Expedition Weight Top)	Purchase Only	\$67-\$125	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. [Patagonia Capliene 4 Zip Neck, 8.6oz]	
Top Insulating Layer (Fleece Jacket)	\$20	\$65	1	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). [Patagonia R2 jacket, 14.8oz]	
Top Insulating Layer (Synthetic "puffy" Jacket)	\$30	\$150-\$180	1	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. [Mountain Hardwear Compressor Jacket, 15oz]	
Fleece or Synthetic Vest	Fleece \$15 Synthetic \$20	Rental Only	1 (optional)	Optional. A polyester fleece vest of Polartec® 200 or a synthetic filled vest (a vest is not a substitute for any other layer). This is an additional layer for early spring courses or for individuals who get cold easily. [Patagonia R2 Vest, 10.1oz or Patagonia Micro Puff Vest, 10.0 oz]	
Wind Shirt/Jacket	\$20	\$70-\$100	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. [Patagonia Houdini, 3.7oz]	
Sport Bras	Purchase Only	\$40	1	We stock Patagonia synthetic sports bras.	



Upper Body Layers (Continued)

Equipment Item	Rental Price	Purchase Price	Quantity	Comments	Check List
Rain Jacket	Purchase Only	\$100-\$165	1	A sturdy, roomy waterproof jacket with a hood. Both coated nylon and breathable fabrics such as Gore-Tex® are acceptable. [Marmot Precip Jacket, 13oz]	
T-Shirts	Purchase Only	\$30- \$40	2	1 synthetic shirt for hiking, and 1 cotton shirt for climbing. We highly recommend Polyester/Capilene® for hiking because it dries much more quickly than cotton and can be incorporated into a layering system. [Patagonia Capilene 1 T-Shirt, 4.6 oz]	

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 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	\$42	1 pair	This insulating layer should be made of polypropylene, wool or Capilene®. Cotton and cotton blends are not acceptable. [Patagonia Capilene 1 Bottoms, 5.5 oz]	
Secondary Insulating Layer (Fleece Pants/ Expedition-Weight Synthetic Bottoms)	\$25	\$50-\$60	1 pair	Polartec® 200 or equivalent. Side zippers (full length, or knee high) make it easier to put pants on over hiking boots. [Patagonia Capilene 4 Bottoms, 6.5oz or Mountain Hardwear Compressor Pants, 18 oz]	
Wind Pants/Rain Pants	\$25	\$65	1 pair	Breathable nylon 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. NOLS Southwest only rents wind pants. [Patagonia Rain Shadow Pants, 8oz]	
Nylon Shorts	Purchase Only	\$36-\$45	1 pair	For the hiking section. 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. [Patagonia Baggies, 6.7 oz]	
Underwear	Purchase Only	\$20-\$45	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	Purchase Only	\$20	1	Bring 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	\$14-\$35	1	A warm hat made of wool or fleece.	
Balaclava	\$4	Rental Only	1	Full head and neck coverings with an opening for the face. Usually made out of Polartec® 100 or 200 fleece.	
Lightweight Gloves	Purchase Only	\$10-\$15	1 pair	Ragg wool or fleece are acceptable.	

Packs					
We carry NOLS Lowe backpacks, NOLS Deuter backpacks and Dana Design Astraplane backpacks.					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Backpack	\$80	New \$350-\$490 Used packs available for \$150-\$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 5500 to 7000 cubic inches. A 5000-5500 cubic inch pack may be acceptable with the addition of two large accessory side pockets. A compression stuff sack is required for your sleeping bag.</p> <p>Recommended packs: NOLS/LOWE Pack (available through NOLS Mail Order). Dana Designs Astraplane, Osprey Motherlode, Lowe Alpine Systems Kanga Himal 100, Gregory Denali, North Face Aurora, Arc'teryx Bora 95, 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	Rental Only	1	Used for the climbing section. Needs to be big enough for personal things and group climbing gear—minimum of 2500 cubic inches. A school book-bag pack is usually too small.	
Small Zip (Duffel) Bag	\$6	\$20	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	\$5-\$10	2 or 3	Small nylon or mesh sacks with drawstrings for organizing items in your pack.	
Big Duffel Bag	\$20	\$40	1	A large-sized zippered nylon bag (4000-8000 cu. inches) is used for packing 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	\$70	Available new and used for \$100-\$450	1	Despite popular belief, it gets very cold in the Southwest at night. We recommend either synthetic (Quallofil®, Hollofil®, Polarguard®, etc.) or down bags. A bag with a 5°-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 stock the 0° Mountain Hardwear Lamina, 4lbs, 2oz for rent and sell the Montbell SS Down hugger.	
Compression Sleeping Bag Stuff Sack	\$15	\$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.	
Plastic Trash Bags	Purchase Only	\$.50 - \$.75	2-3	2-3 heavy-duty trash compactor bags (33 gallon) to help waterproof your sleeping bag stuff sack and backpack.	
Sleeping Pad	\$7	\$8-\$12 (ensolite) \$50-\$60 (Therm-A-Rest®)	1	A full-length or 3/4-length closed cell foam pad to insulate and pad between the ground and your sleeping bag. Therm-A-Rest® pads are acceptable if you bring a patch repair kit. NOLS does not rent Therm-A-Rests®. [Therm-a-rest Trail Lite Regular, 2.0 lbs]	
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, as well. This helps make it easier to pack and cuts down on wear and tear.	
Ground Cloth	\$5	\$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 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	\$40	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.	
Climbing Pants	Purchase Only	\$50-\$70	1	Optional. Loose fitting cotton or polypro pants to protect your legs while climbing.	

Climbing Equipment (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Cotton Shorts	Purchase Only	\$30 - \$60	1 pair	Cotton shorts are appropriate for climbing. Longer shorts are best to wear with a harness. We have a limited stock of Prana® shorts.	
Chalk Bag	Purchase Only	\$18	1	Optional. Chalk bags hold chalk that is used to dry hands while climbing.	
Chalk Ball	Purchase Only	\$8-\$16	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.					

River Equipment					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Dry Bag (small and large)	Sm-\$10 Lg.-\$25	Rental Only	1 of each	Large, expedition-style waterproof bag that keeps all your gear dry on the river. Backpack straps and waist-belt allow easy carrying. A small dry bag carries lunch and other items needed during the day.	
Long-Sleeved Cotton Shirt	Must Bring	Must Bring	1	A collared long-sleeved cotton shirt is an effective form of sun protection.	
Light-Weight Cotton Pants	Must Bring	Must Bring	1	Convenient to keep sun off your legs around camp.	
Swimsuit	Must Bring	Must Bring	1	Most men prefer wearing nylon shorts. Some women like to wear lycra swimsuits in the river; others prefer nylon shorts and a "jog-bra" type top.	
River Sandals	Must Bring	Must Bring	1 pair	Rubber sandals with a covered heel and toe are necessary. They must have a heel strap to keep them stable on your feet while paddling. Examples include the Keen Newport H2 or Venice H2 sandals. You can substitute sandals for a pair of running shoes that you don't mind getting muddy. Neither of these options is available at NOLS Southwest.	

Miscellaneous Items					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Insulated Mug	Purchase Only	\$5-\$15	1	12 to 20 oz. insulated mugs with lids are preferred.	
Bowl	Purchase Only	\$6-\$8	1	A bowl with a snap-on lid is also handy. Tupperware is best.	
Spoon	Purchase Only	\$1-\$9	1	Lexan spoons are light, durable and popular.	
Water Bottles	Purchase Only	\$8-\$10	2	Wide mouth quart- or liter-size plastic bottles with a total capacity of 2 liters.	

Miscellaneous Items (Continued)					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Hydration System	Purchase Only	\$32-\$60	1	Very handy and popular. We carry a variety of Camelbak® packs.	
Sunglass Retainers	Purchase Only	\$6	1	Optional. Chums® or Croakies® for keeping track of your glasses or sunglasses.	
Sunglasses	Purchase Only	\$40-\$100	1 pair	Lenses should block 100% ultraviolet and 95% infrared light. We carry various brands and styles.	
Headlamp	Purchase Only	\$30-\$50	1	Durable and lightweight. LED Head lamps are popular. Bring spare batteries. We carry Tikka®, TikkaPlus®, and TikkaXP® headlamps.	
Batteries	Purchase Only	\$.75 each	2 sets	We have AA and AAA batteries for sale.	
Disposable Lighters	Purchase Only	\$1.50	1	Used for lighting your camp stove.	
Toilet Articles	Purchase Only	\$2.50 - \$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.	
Lip Balm	Purchase Only	\$2-4	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.	
Bandannas	Purchase Only	\$3	2 or 3	A few of these are always handy.	
Watch	Purchase Only	\$35-\$55	1	A watch with an alarm is a necessary item.	
Notepad and Pencil/Pen	Purchase Only	\$1-\$8	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	N/A	1	We will provide you a towel for showering with in between sections.	
Our advice? Keep the toiletries, pocket knife 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	2 or 3 pairs	Lightweight wool, polypropylene or Capilene® "wick dry" socks. You will need at least two pairs if you are using the liner sock/wool sock combination in your hiking boots. If you're renting climbing shoes from us, these are mandatory.	
Pocket Knife	Purchase Only	\$40-\$70	1	One small, lightweight, knife is sufficient. Simple Swiss Army knives are best.	
Insoles	Must Bring	Must Bring	1 pair	To assure your comfort in hiking boots an after market insole (these are insoles available for purchase separate from footwear) can provide arch support, stabilize your foot and heel, add cushion and help volume adjustment. Suggestions are Spenco Polysorb®, Superfeet, Montrail Stabilizing Insoles.	
Book	Purchase Only	\$6-\$38	1 or 2	A small, lightweight paperback reading book.	
Thermos	Purchase Only	\$28-\$48	1	Great for keeping morning drinks warm.	
Camera	Must Bring	Must Bring	1	Lightweight, 35 mm or digital compact cameras are sufficient; bring a protective case. Avoid heavy lenses and elaborate set-ups. We sell disposable cameras.	
Water Treatment	Must Bring	Must Bring	1	We supply Aqua Mira for 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.	
Vitamins	Must Bring	Must Bring	-----	Not necessary, but a small quantity of multi-vitamins is popular among staff and students for this length of course.	
Backpacker's Camp Chair	Purchase Only	\$30	1	Crazy Creek or one with Therm-A-Rest fitting. These collapsible camp chairs may mean carrying a little extra weight, but most students and instructors consider it a worthwhile investment.	
Roll of quarters/cash	Must Bring	Must Bring	\$5-\$10	For doing laundry between sections.	
Prescription Glasses And Contact Lenses	Must Bring	Must Bring	1-2 pairs	Bring a 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.	
Trekking Poles	\$15/pole	Rental Only	1 or 2	If you like to use a ski pole while you hike. Should be a sturdy 2-3 section pole that packs easily.	

Footwear					
Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Hiking Boots	Must Bring	Must Bring	1 pair	Sturdy all leather heavy backpacking boots with good ankle support and proper fit are critical for hiking on uneven terrain with heavy expedition packs. See information on page 9.	
Socks	Purchase Only	\$12-\$15	3-4 pair	Crew length. Socks must be heavy ragg wool or heavy wool/synthetic blend. Cotton blend socks are not appropriate.	
Gaiters	Purchase Only	\$30-\$50	1 pair	Gaiters keep dirt and other debris from entering the boot, and are a critical part of your footwear system. Outdoor Research, Black Diamond, Granite Gear, Rocky Mtn High, and Mountain Hardwear all manufacture suitable gaiters.	
Camp Shoes	Purchase only	\$20-\$39 (Crocs)	1 pair	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. Crocs have become a new lightweight favorite around NOLS.	
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, please give us a call.					

Recommended Boots

NOLS Southwest does not rent or sell hiking boots. Medium-weight, off-trail backpacking/light mountaineering boots work best. This type of backpacking 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 models listed here should help define what boots are acceptable for your course. It is fine to substitute a similar boot for one of the types 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

Garmont: 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: Zephyer, 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	Climbing Protection	Maps & Compass	Binoculars
Camp Stoves	Caving/Climbing Ropes	Reference Books	Equipment Repair Kits
Fuel and Fuel Bottles	Helmets	First Aid Kits	Cooking Gear
Trowels or Shovels	GPS Units		

