

Equipment List

Rocky Mountain Lightweight Backpacking

Welcome to NOLS Rocky Mountain!

The Lightweight Backpacking course is designed to travel in the mountains with the lightest load possible. To do this you will need some specialized lightweight gear built specifically for expeditions such as these. NOLS Rocky Mountain does carry some of this gear, but you will need to go out and purchase the bulk of the “lightweight” options on your own, before the course begins.

This equipment list is broken down into two sections. The first includes all the equipment that you will have access to rent or purchase from NOLS Rocky Mountain upon arrival, or things that you can bring from home.

The second section is a list of equipment you will need to bring with you from home. At this time, NOLS Rocky Mountain does not stock enough “light” options of these items, for this specific course type, in our normal inventory.

Remember, if you purchase gear before arriving, **lightweight** is the name of the game. Every ounce counts towards the total weight of your pack. Do research, read labels and ask questions. The goal is to have each person go into the wilderness with a 25 lbs (or lighter) pack.

We strongly recommend that you purchase an eleven-pound postage scale to help you prepare for this trip. By weighing each piece of equipment you might bring, you will be able to make better choices in your gear selection. Scales will also be available to borrow during the issue process at NOLS Rocky Mountain.

Keep in mind that route, current and seasonal weather conditions, and the instructors working the course will all influence the gear that you will actually take into the field. A reminder: Late Summer in the Rockies can produce variable weather conditions from hot and sunny to rainy or even snow. Because of this it is impossible for us to predict exactly what you will need for your course months or weeks in advance. Please bring enough options with you when you show up to NOLS Rocky Mountain and you can always leave layers and luggage behind in our storage lockers when you leave for the field.

While NOLS Rocky Mountain strives to maintain our inventory of equipment for all courses, factors beyond our control such as shipping, supplier inventory and equipment demand may necessitate the substitution of equipment listed as in stock. NOLS reserves the right to substitute items or inventory at any time.

Resources: An excellent resource for unique ultra-light gear is the website www.backpackinglight.com. In addition, www.golite.com, www.granitegear.com, www.outdoorresearch.com, www.montbell.com and www.gossamergear.com are great lightweight gear resources.

If you have any questions regarding lightweight equipment for this course, please contact Ryan Hutchins, NOLS Rocky Mountain Program Supervisor, at ryan_hutchins@nols.edu.



GEAR TO BRING OR RENT/PURCHASE FROM NOLS

You will need to either bring the items below, or else rent or purchase them from NOLS. If you already own items you'd like to use, bring them with you and we will check them out and see if they suffice for this course type.

Equipment	Rental Price	Purchase Price	Quantity	Comments	Check List
Wind Jacket	N/A	\$80	1	A lightweight, breathable wind shirt or jacket. The Patagonia Houdini Jacket (3.7oz), the GoLite Ether Jacket (4oz), or the GoLite WISP wind shirt (3 oz) and the Mont-Bell U.L. wind shirt (3.3oz) are great examples. No more than 4 oz.	
Rain Jacket	N/A	\$150	1	Bring a lightweight (less than 16oz), waterproof, breathable rain jacket. GoLite, Outdoor Research, Marmot, and Patagonia make great lightweight options. We stock the Mountain Hardware Epic Jacket (15oz).	
Shorts	N/A	\$35 - \$45	1	Any quick drying pair of nylon shorts, with or without built-in underwear. We carry Patagonia Baggies "Short"(6oz) and "Long" (10.5oz).	
Long Underwear Bottoms	N/A	\$45	1	Lightweight bottoms such as GoLite Drimove bottom (6oz) or Patagonia Capilene 1 or 2 (5.5oz). We carry Patagonia Capilene 2 bottoms (5.5oz).	
Long Underwear Top	N/A	\$40-55	1	Lightweight long sleeve top such as Patagonia Capilene 1 (5.5 oz), which we have in stock at NOLS Rocky Mountain.	
Short Sleeve Top	N/A	\$39	1	Short sleeve lightweight top. Examples are GoLite Drimove Lite (4oz) or Patagonia Capilene 1 (4.5oz). You can find the Capilene 1 Tee or a similar item at NOLS Rocky Mountain.	
Fleece Hat	N/A	\$15 - \$20	1	Needed for warmth. We carry a variety of warm hats.	
Gloves	N/A	\$8-\$15	1 pr	You will need one pair of thin gloves (synthetic or wool). We carry thin wool gloves, liners and Manzella thin fleece gloves.	
Titanium or Plastic Bowl/Mug	N/A	\$30	1	A super lightweight titanium mug/bowl is excellent for eating, drinking and also cooking. We stock the Mont-Bell 450ml (2.5oz). Also look at options from MSR. Or a simple and light ziploc® or Tupperware® type container.	
Spoon	N/A	\$2-\$18	1	Titanium (.75oz) or Lexan (1.1oz) spoons work well. We carry Lexan spoons for purchase.	

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Water Bottle/ Container	N/A	\$8-\$10	1	You will need at least 2-liter capacity for your trip. Lightweight collapsible containers with or without hoses work great. (i.e. check out different styles from Platypus or MSR) One Liter plastic Gatorade bottles also work well. Nalgene, Lexan or white plastic bottles are too heavy.	
Lip Balm	N/A	\$3	1	Stick, cream or tube type moisturizing balm with Sun Protection Factor (SPF) 15 or greater.	
Sunscreen	N/A	\$4-\$9	1	One 3-oz. bottle with Sun Protection Factor (SPF) of 30 or greater.	
Bandana	N/A	\$3	1	Useful for a variety of purposes. Silk is a great lighter weight choice.	
Sun Hat	N/A	\$20	1	A light baseball or running cap is great for sun protection. Also consider wide brimmed hats for better protection.	
Sunglasses	N/A	\$40-\$70	1 pr	Lenses should be dark and block at least 100% ultraviolet and 95% infrared light. We stock Optic Nerve Sunglasses.	
Headlamp	N/A	\$25-\$45	1	Bring a lightweight LED headlamp. Examples are Petzl E-Lite (.95oz with batteries) or the Black Diamond Ion (1.06oz with batteries). We carry the Black Diamond Spot (3oz with batteries) and the Petzl E-Lite (.95oz).	
Lighter	N/A	\$1.50	1	A small Bic lighter is suggested.	
Plastic Trash Bag	N/A	\$.75	1	You will need one small trash compactor bag (3 mil) for making packs more waterproof.	
Underwear	N/A	\$20-\$35	1 pair	Optional. One pair of silk weight or polyester boxers or briefs. Females can bring cotton, if preferred. We stock Patagonia Capilene boxers and briefs.	
Sports Bra	N/A	\$35	1	Females will need one synthetic sports bra. We stock various brands.	

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Watch	N/A	\$40-\$60	1	Water-resistant. An alarm is necessary for early morning starts.	
Trekking Poles	N/A	\$65/pair	1 pair	Optional. If you have trekking poles, and want to hike with them, please bring them with you. They are NOT essential or required, but many folks enjoy hiking with them.	
Gaiters	N/A	\$30 - \$45	1 pair	A tiny, lightweight gaiter is recommended, such as Dirty Girl Gaiters, Outdoor Research Low Gaiters or REI Minstral Gaiters. We carry Outdoor Research Low Gaiters (4.8oz).	
Stuff Sacks	N/A	\$15-20	2	Optional. A few small stuff sacks for organizing gear can be helpful. Please choose the lightest fabric possible (Sil-nylon or Sail Cloth), such as GoLite's Ultra Light Stuff Sack or Granite Gear's Ultralight series or Sea-to-Summit sil-nylon stuff sacks.	

EQUIPMENT YOU MUST BRING WITH YOU

Hiking Shoes: 1 pair. You'll need a lightweight hiking shoe/sneaker that has adequate stability, breathability, and foot protection. High top shoes are not recommended. Avoid shoes with large quantities of leather, as this adds weight and drying time. Gore-Tex liners also increase drying time, if shoes get wet, and decrease breathability (increase heat retention) of shoes. If fit is of concern, please seek expert advice from a reputable retailer. The fit should be slightly roomy, one half size larger than your normal shoe size to accommodate swelling from altitude and exercise. This will also help to avoid blisters and sore feet. Before arriving for your course, take some time to do a few day hikes to make sure your shoes fit comfortably. The following brands* and models are appropriate for the course. They are in no particular order.

Montrail: Sabino Trail, Badrock, AT Plus
 La Sportiva: Cardiff, Barr Trail
 Salomon: XA Pro 3D
 Vasque: Catalyst
 Asolo: Transit XCR
 Innov8: roclite 315

*Shoe companies change model names often, if you cannot find the exact model listed above, simply look for a similar shoe that may have minor differences and a new model name!

A Note on leather hiking boots: Leather hiking boots are not acceptable for your lightweight course. They do not allow enough flexion in the forefoot and ankle and lead to increased blisters and Achilles tendonitis. They also take too long to dry after river crossings and impact soils more than trail runners. Research by the military indicates that one pound of weight on your feet equals about five pounds on your back, therefore the increased weight of leather hiking boots has a huge impact on endurance. If you are concerned with ankle support, Montrail, Innov8 and other manufacturers make mid height trail "runners" that are more appropriate than leather boots.

Sleeping Bag: You should bring a lightweight (2 lbs. or less), down sleeping bag that has a breathable water repellent shell. Ideally, it should be rated 20 degrees. Check out sleeping bags from MontBell, Western Mountaineering, Feathered Friends, GoLite, Mountain Hardwear or Big Agnes. We recommend the GoLite Adrenaline 20 Bag (20 degrees, 1lbs. 13oz.). Also consider using a lightweight quilt style sleeping system, which can be found at GoLite as well.

Sleeping Pad: Bring a lightweight (less than 1lbs.) inflatable (or closed cell foam) sleeping pad that extends from your head to your thighs. We recommend Bozeman Mountain Works TorsoLite pad (10.3 oz.) or the Montbell UL Pad 90 (10.2 oz.). Therm-a-Rest makes some heavier “lightweight” options in their ProLite Series (Prolite 3-short, 13 oz.). MontBell also makes an excellent inflatable pillow, which weighs only 2.3 oz. NOLS carries a ¾ length inflatable pad that weighs a respectable 15 oz.

Backpack: Bring a lightweight (less than 2 lbs.) backpack with approximately 3000 cubic inches of capacity. We recommend the GoLite Jam pack (~1lbs. 6oz.). Frameless backpacks save considerable weight, so look for packs that use a foam framesheet vs. plastic and aluminum. Other options include packs from smaller manufacturers such as Six Moon Designs, Hyperlight Mountain Gear (super high tech and cutting edge), Gossemer Gear, and some Osprey packs.

Down Jacket: You will be excited to have a down 800-fill puffy jacket, especially in the evenings. Something less than 20 oz. is ideal. MontBell, GoLite, Patagonia and Mountain Hardwear all make great lightweight options. We recommend the Montbell Alpine Light jacket (11.3 oz.). Light synthetics are also acceptable but are generally heavier than the equivalent down jacket and are less compressible in the pack. Fleece jackets are heavier, less warm and bulky, please avoid them.

Synthetic Puffy Pants: You can substitute bringing a pair of polypro lightweight bottoms and bring a pair of lightweight synthetic puffy pants instead. Bringing these pants may also allow you to bring a lighter rated sleeping bag (i.e. 30 degree instead of 20 degree), as you can sleep in your pants for increased warmth. If you sleep cold, you will want to bring both. Check out options from Mont-Bell, or Patagonia. We recommend the Montbell Thermawrap pant (10.2oz).

Wind Pants/hiking pants: (Optional-recommended) Bring lightweight (less than 5oz) breathable wind pants. Check out Outdoor Research, GoLite and Mont-Bell for the lightest options. A lightweight rain pant can be substituted for wind pants. Many Instructors choose to hike in lightweight nylon hiking or trekking pant, all the time, rather than carry wind pants and shorts.

Socks: Bring 2-3 pairs of short (crew) length, comfortable, lightweight socks that should fit with your hiking shoe. These should be synthetic or wool. Check out crew length socks from Smartwool, Thorlos and Wigwam.

Toiletries: Toothbrush, toothpaste, comb, brush, skin lotion, tampons. Travel or sample sizes are ideal.

GROUP GEAR

All group equipment necessary for your expedition, such as lightweight shelters, cook gear, navigation equipment, etc. will be provided by NOLS. If you already own items on the list and you'd like to bring them, please do! Your instructors can review the gear and help you decide if it is appropriate for the course. Remember, the ultimate goal is to travel into the wilderness with a pack that weighs less than 25 pounds with all of your group gear, food and water!

