

The National Center for Outdoor & Adventure Education (NCOAE) equipment list of required and optional gear will help you decide what to bring and what not to bring on your NCOAE adventure.

When it comes to outdoor equipment, there's no need to go all out and buy every piece of fancy gear just to cram in into your new, state of the art backpack. Remember you will be carrying everything you bring with you on your trip – PLUS some of the food and some of the group gear. Foremost in your mind should be weight, each item adds up to what will eventually be strapped to your back. So do the research, read the labels and consider what you can do without. If you don't need something, don't bring it!

You can save money too using the gear provided by NCOAE and by purchasing many items from the athletic clothing, sporting goods, and camping sections at your local discount store, such as Target. Athletic clothing is usually synthetic and works well for camping.

- If you have questions about gear you already own, send us an e-mail or call and we will assess its suitability for the environment where it will be used. We might suggest that you return your grandfather's heavy cotton sleeping bag to the garage and rent or purchase a lightweight, synthetic version instead. Any gear you bring must meet NCOAE's standards.
- If you prefer to purchase all of your gear that's fine too, but if you're not sure you'll ever use that \$400 internal frame backpack or sleeping bag again, we may have one available to rent! Of course you don't have to rent equipment from us, but our gear is tailor-made to fit our expeditions
- All participants who wish to rent gear must pay a \$250 deposit on gear to cover possible loss or damage. If all gear is returned in the condition in which you received it, the full deposit will be applied to any rental charges, and the remainder returned to you – so inspect the gear closely before and after renting. Damaged or lost group gear expenses are divided among all participants. Damaged or lost rental gear is charged to the renter. All rental gear is \$25 per item.
- Please do not pack jeans or jean shorts. If you have a choice, please pack non-cotton clothing. Mesh or synthetic clothing dries quickest and therefore is the best option while backpacking.
- Remember to bring one or two sets of "in-town clothes" for your return flight / drive after the trip!
- Items listed below with an asterisk (\*) may be available, in limited quantities, for student rental, on an as needed basis.

# Comments, questions, concerns... Call NCOAE Headquarters Monday through Friday between the hours of 8:30am-4:30pm EST at (910) 399-8090.



Packs and Bags					
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST	
Internal Frame Backpack*	Optional – NCOAE provides	1	Internal frame backpack, with a volume of 65 to 85 liters is ideal (3,900-5,200 cubic inches).		
Waterproof Stuff Sacks / Gallon Ziplocs	Must Bring	1-4	Used to organize items in your pack. Lightweight drysacks are convenient (example: eVent Sil DrySack).		
Day Pack	Must Bring	1	Small backpack for use on day hikes or trips into town.		
Zip Duffle	Must Bring	1	Used to organize and store items while at camp. (Example: Outdoor Products 12x24 Deluxe Duffle).		
Dry Bag	Optional – NCOAE provides	1	Used to organize and store clothing while on the river. (Example: Sealline Dry Bag, 20-40 liters).		
Footwear					
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST	
Mid-Weight Hiking Boot	Must Bring	1 pair	Must be at least mid-weight. Please read the Boot Selection Guide at the end of this list.		
Camp Shoes	Must Bring	1 pair	Closed-toed shoes are a must to protect your feet and are more comfortable for wearing in camp.		
River Shoes / Sandals	Must Bring	1 pair	<b>Recommend closed-toed</b> for protection from rocks, sharp objects, or in case you happen to fall out in the water. (Example: Keens). You bring "open-toe" sandals if you'd prefer. (Example: Chacos)		
Hiking Socks	Must Bring	4-6 pairs	Must be 75%–100% wool, merino wool, heavy ragg type, or thick polypropylene. <b>No cotton or wool-cotton blends.</b>		
Neoprene Socks	Optional	1 pair	To keep feet warm while paddling. (Example: SealSkinz All Season Waterproof)		
Gaiters	Optional	1 pair	Low gaiters are acceptable.		
Upper Body Clothing	1	1			

You need at least **three insulating layers** (base layer, mid-weight insulation layer, & puffy jacket), a wind-proof layer, a rain layer, and a tshirt. Make sure your layers fit comfortably over each other. If you get cold easily, we suggest that you take four insulating layers, or three layers plus a vest.

EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Base Layer - Long Underwear Top	Must Bring	2	Light or expedition-weight synthetic or performance wool is best. (Examples: Patagonia Capilene, Icebreaker wool)	
Fleece Jacket or Shirt	Must Bring	1	Light to mid-weight fleece jacket that fits over your base layers. (Example: Mountain Hardwear Microchill)	
Long-Sleeved Shirt / Expedition Weight Pullover	Must Bring	1	Must be synthetic. (Examples: Patagonia R1 Hoodie, Mountain Hardwear Expedition-Weight zip-tee)	
T-Shirt	Must Bring	3 - 4	Lightweight synthetic or wool shirts recommended.	
Fleece or Synthetic-fill Insulated Vest	Optional	1	A vest can supplement other upper layers, which is good for folks who get cold easily. (Example: Patagonia Synchilla Vest)	



		1	1		
Insulated Jacket	Must Bring	1	A warm, synthetic-fill "puffy" jacket that fits over your base layers & under your ski jacket. (Example: Patagonia Nano Puff Hoody)		
Rain Jacket*	Must Bring, or Rent - \$25.00	1	Jacket should be roomy enough to fit comfortably over all upper- body layers. For rainy or stormy days in the backcountry. <b>Ponchos</b> <b>are NOT ACCEPTABLE</b> .		
Lower Body Clothing					
You need <b>two to three l</b> Example combination: N	-		at fit comfortably over each other and underneath your wind or rain pa sece pants.	ints.	
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST	
Base Layer - Long Underwear Bottoms	Must Bring	2 pairs	Mid- or expedition-weight synthetic or performance wool is best. (Examples: Patagonia Capilene, Icebreaker wool).		
Insulated Pants or Expedition-Weight Fleece Pants	Optional	1 pair	Fleece or synthetic-filled pants for when the weather is especially cold. (Examples: Sherpa Jaaro Microfleece Pants, Mountain Hardwear Compressor Pants)		
Rain Pants*	Must Bring, or Rent - \$25.00	1 pair	These need to fit comfortably over your hiking pants.		
Hiking Pants	Must Bring	2 pair	Nylon or other synthetic hiking pants are recommended for protection from bugs and dense vegetation.		
Nylon Shorts	Must Bring	1 pair	Nice for warm days. Pockets are nice to have.		
Miscellaneous Clothing					
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST	
Sun Hat or Baseball Cap	Must Bring	1	Should be wide-brimmed to protect from sun.		
Winter Hat	Must Bring	1	Fleece or wool hat that will fully cover your ears.		
Bathing Suit	Must Bring	1	Necessary for paddling parts of the adventure when possible.		
Buff, Balaclava, or Neck Gaiter	Optional	1	Used to keep your head, neck, and ears warm or protect from the wind and sun – can replace a light cap		
Bandana	Must Bring	1	For multiple uses.		
Glove Liners	Must Bring	1-2 pair	Lightweight wool or synthetic gloves may be layered with heavier gloves for warmth or worn alone for sun protection.		
Waterproof Gloves or Mittens	Must Bring	2 pair	Wool or synthetic gloves or mittens for cold mornings or evenings around camp. Must be waterproof or must bring waterproof glove/mitten shells.		
			To keep hands warm while paddling		
Neoprene Gloves	Optional	1 pair	To keep hands warm while paddling		



In Town Clothes	Must Bring	1-2 pairs	Comfortable, casual set of clothes for in town & for your flight home at the end of your course.	
Sleeping Gear		1		
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Mummy Style Sleeping Bag w/Stuff Sack*	Must Bring, or Rent - \$25.00	1	Temperature rating of 20 degrees F or colder. Synthetic, not down recommended. Compression stuff sack recommended.	
Sleeping Bag Liner	Optional	1	To keep you warmer on cold nights. Recommended if you get cold easily at night. Wool or synthetic recommended.	
Sleeping Pad*	Must Bring, or Rent - \$25.00	1	Closed-cell foam or self-inflating pads. (Example: Therm-a-rest Ridgerest or Z Lite).	
Miscellaneous Gear	I			
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Required or Prescription Medication (if applicable)	Must Bring	1 Set	<b>Bring enough to last the entire trip.</b> All medications must be in the original bottle with instructions for administration, and your name on it. Please pack all prescribed medicine.	
Toiletries (small, travel sized only)	Must Bring	1 Set	Toothbrush, Toothpaste, Lip Balm w/Sunscreen (SPF 15 or higher), Moisturizer, Feminine Hygiene products. Shampoo, Conditioner, & Soap, Washcloth/Loofah, & Facewash for in-town days.	
Watch w/ Alarm	Must Bring	1	Must be waterproof (Example: Timex Expedition)	
Headlamp	Must Bring	1	Durable and lightweight.	
Extra batteries	Must Bring	1-2 sets	Bring 1-2 spare sets for headlamp	
Travel Power Adapters	Must Bring	1 set	For charging camera and other electronics. Chile uses Type C (E&F work as well) and Type L.	
Pocket Knife	Optional	1	One small pocket knife is sufficient.	
Water bottle	Must Bring	2	Heavy, durable plastic. Wide-mouth and must be at least 32 oz. A lightweight bladder system can replace 1 durable water bottle. (Example: Platypus SoftBottle and Nalgene).	
Hydration System	Optional	1	Can be used to replace one durable waterbottle. CamelBak or Platypus are popular.	
Insulated mug	Must Bring	1	Durable plastic for hot drinks.	
Plastic Bowl	Must Bring	1	Tupperware or Nalgene style, 16-30 oz capacity, with lid.	
Spoon or Spork	Must Bring	1	Plastic or metal utensils	
Camp Towel	Must Bring	1	A pack towel that is compressible, lightweight, quick-drying, made of a microfiber or microfiber blend. For use after sweating or after getting in water.	
Insect Repellent & Sunscreen	Must Bring	1	Small, travel sized bottles – NO AEROSOLS. Sunscreen must be SPF 30 or greater.	
Sunglasses, Wrap- around style	Must Bring	1	Durable with 100% UV protection. If you wear prescription lenses, bring your own prescription sunglasses. You will want to block the	



			sun from the sides. (Examples: Julb	o, Native).	
Prescription Glasses / Contact Lenses	Must Bring	Multiple	If you wear prescription glasses or contact lenses, bring a spare set. Even if you wear contacts daily, plan to carry a pair of glasses.		
Eyeglasses Strap	Optional	1	Good brands are Chums and Croaki	ies.	
Trekking Poles	Optional	1-2			
Sit pad or Camp chair	Optional	1	Portable seat for increased insulation when sitting on ground. Crazy Creek, sleeping pad adaptor, or make from cut foam.		
Optional Items		_			
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS		CHECK LIST
Camera	Optional	1	Small, waterproof & shockproof camera. Bring extra battery and memory card. You are not permitted to bring cell phones or tables into the backcountry, even for camera use.		
Book	Optional	1	A small, lightweight book for reading.		
Small Card Game or Cards	Optional	1	For down time.		
Camp Pillow	Optional	1	Should be small, made out of a synthetic material and compressible.		
NCOAE Will Supply					
Students share both the	e use of and the re	sponsibility f	or the group gear that NCOAE dispe	enses.	
Tents		Group Tarp		Toilet Paper & Trowel	
Stoves, Fuel Bottles & Fuel		Maps & Reference Books/Materials		Compass & Whistle	
Cooking Gear		Course Food & Spice Kit		Water Treatment	
First Aid Kit		Repair Kit Group Sunscreen & Bug Spray			
Bear Canisters or Bags		Soap, Hand Sanitizer & Hygiene Wipes Solo Tarps			
PFD's		Helmets Paddling Gear & Safety Equipmen		it	



#### **Boot Selection Guide**

NCOAE has been outfitting people with boots for many years, and our priorities have remained the same: we want you to have footwear that provides adequate protection for your feet and ankles, that is durable enough to withstand weeks of wet, rugged wear and that provides reasonable comfort. Many boots available on the market do not meet these criteria.

When considering footwear, remember that your course may travel off trail. You may be walking through cold streams, and your feet could get wet. You could be in rain or for days. The type of footwear that you need will depend on how heavy your pack is and how strong your ankles and feet are.

Here are some features to look for in and hiking boots:

- A sole that provides good traction like Vibram or other lugged sole.
- Some form of nylon shank to provide foot support and protection.
- Ankle support
- Durable uppers that will withstand hiking among sharp boulders and dense vegetation.
- A Gore-Tex liner is recommended, but not required. Your feet will get wet if the river comes in over the top of your boot.
- A comfortable fit with your preferred hiking socks. Boots that are too small are a common cause of blisters.

The following list of acceptable footwear is not exhaustive. It is to be used as a guide to the general type of footwear acceptable for your course. It is fine to substitute a similar boot or shoe for one of the types listed here. If you are considering a lighter boot or shoe, you will have to be committed to trimming your pack weight to below 40 lbs. which takes prior commitment to weighing each ounce of your personal gear. Expect to be carrying around 30-45 percent of your own body weight on your back. You will be carrying almost 25 pounds of group gear, so factor that in to your total pack weight.

#### Sturdy hiking boots:

Asolo: Elbrus, Lagazuoi, Shiraz, TPS Series, Equalon Lowa: Cevedale Pro GTX, Tibet Pro GTX Garmont: Rambler GTX, Dakota, Tower Trek GTX La Sportiva: Garnet GTX, Omega GTX Scarpa: Kinesis GTX, Zodiac GTX, Bhutan GTX, Terra GTX Vasque: Summit GTX, Saga GTX, Oboz: Wind River