

NCOAE Equipment List

North Carolina

Teen Mountain Expedition



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. Remember you will be carrying everything you bring with you on your trip – PLUS some of the food and some of the group gear. 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 or Wal-Mart. 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 use NCOAE's lightweight, synthetic version instead. **Any gear you bring must meet NCOAE's standards.**
- If you prefer to purchase 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 recommend using the gear provided by NCOAE, which is especially selected to meet the needs of our trips.
- 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.
- **Do not bring any technology (i.e. cell phones, tablets or MP3 players).**

If you have any questions or concerns about purchasing specific equipment please contact NCOAE Headquarters for assistance. Items listed below with an asterisk () indicate NCOAE has a limited amount of extra equipment available for students use, on an as needed basis.*

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

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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 75 liters.	<input type="checkbox"/>
Duffle Bag	Must Bring	1	To hold items in when not being used.	<input type="checkbox"/>
Footwear				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Mid-Weight Hiking Boots*	Must Bring	1 pair	Sturdy, mid-weight hiking boot. Please read the Boot Selection Guide at the end of this list.	<input type="checkbox"/>
Hiking Socks	Must Bring	3-4 pairs	Must be 75%–100% wool, merino wool, synthetic-wool blend. No cotton or cotton blends.	<input type="checkbox"/>
Camp Shoes	Must Bring	1 pair	Lightweight sneakers (or sandals with a heel strap). These are for around camp. After hiking, you will want to take your hiking boots off.	<input type="checkbox"/>
Upper Body Clothing				
You need at least three insulating layers : A wind-proof/rain layer, a mid layer, and a t-shirt. Make sure your layers fit comfortably over each other. Example combination: Long underwear + t-shirt + rain jacket.				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Base Layer - Long Underwear Top	Must Bring	1	Light to mid-weight synthetic or wool is best.	<input type="checkbox"/>
Long Sleeved Shirt	Must Bring	1	Nylon or other synthetic long sleeved shirt, roomy enough to fit over base layers. Protection from bugs, wind, brush or sun.	<input type="checkbox"/>
Fleece or Light Jacket	Must Bring	1	Light- to mid-weight fleece or synthetic-fill jacket that fits over your base layers. No cotton hoodies or jackets.	<input type="checkbox"/>
T-Shirt	Must Bring	2-3	We recommend synthetic, lightweight polyester shirts.	<input type="checkbox"/>
Rain Jacket*	Must Bring	1	Your rain jacket should be roomy enough to fit comfortably over all upper-body layers. Ponchos are NOT acceptable.	<input type="checkbox"/>
Lower Body Clothing				
You need two to three lower-body insulating layers that fit comfortably over each other and underneath your rain pants. Example combination: Long underwear + hiking pants + rain pants.				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Base Layer - Long Underwear Bottoms / Tights	Must Bring	1-2 pairs	Light to mid-weight synthetic or wool is best.	<input type="checkbox"/>
Rain Pants	Optional – NCOAE provides	1 pair	These need to fit comfortably over your hiking pants.	<input type="checkbox"/>
Hiking Pants	Must Bring	1 pair	Nylon or other synthetic hiking pants are recommended for protection from bugs and dense vegetation.	<input type="checkbox"/>
Shorts	Must Bring	1-2 pair	Light weight, quick drying (like board shorts or mesh) athletic short. Should be long enough to cover length of your thigh to prevent chafing.	<input type="checkbox"/>

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Miscellaneous Clothing				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Sun Hat or Baseball Cap	Must Bring	1	Should be wide-brimmed to protect from sun.	<input type="checkbox"/>
Buff	Optional	1	Used to keep your head, neck, and ears warm or protect from the wind and sun – can replace a light cap	<input type="checkbox"/>
Bandana	Must Bring	1	For multiple uses.	<input type="checkbox"/>
Swimsuit	Must Bring	1		<input type="checkbox"/>
Light Winter Hat	Must Bring	1	Lightweight hat that will fully cover your ears, for cold mornings or evenings around camp.	<input type="checkbox"/>
Light Gloves or Mittens	Must Bring	1	Lightweight wool or synthetic gloves for cold mornings or evenings around camp.	<input type="checkbox"/>
Underwear/Bras	Must Bring	4-7 pairs underwear; 2 Bras	Undergarments made from synthetic materials or wool to wick moisture are highly recommended. Cotton briefs for women are acceptable.	<input type="checkbox"/>
In Town Clothes	Must Bring	1 pair	Comfortable, casual set of clothes for travelling home at the end of your course.	<input type="checkbox"/>
Sleeping Gear				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Mummy Style Sleeping Bag w/Stuff Sack	Optional – NCOAE provides	1	Temperature rating of 20 degrees F or colder. Recommend synthetic and a compression stuff sack.	<input type="checkbox"/>
Sleeping Pad	Optional – NCOAE provides	1	Closed-cell foam or self-inflating pad.	<input type="checkbox"/>
Miscellaneous Gear				
EQUIPMENT	REQUIREMENT	QUANTITY	COMMENTS	CHECK LIST
Required or Prescription Medication (if applicable)	Must Bring	1 Set	Bring enough to last the entire trip. All medications must be in the original bottle with instructions for administration, and your name on it. Please pack all prescribed medicine.	<input type="checkbox"/>
Toiletries (2-3 oz travel sized only)	Must Bring	1 Set	Toothbrush, Toothpaste, Lip Balm w/Sunscreen (SPF 15 or higher), Feminine Hygiene products. <i>Shampoo, Conditioner, Face Wash, Soap for post-trip use only.</i>	<input type="checkbox"/>
Headlamp	Optional – NCOAE Provides	1	Durable and lightweight.	<input type="checkbox"/>
Waterbottle – 32oz	Optional – NCOAE provides	2	Heavy, durable plastic. Must be at least 32 oz.	<input type="checkbox"/>
Hydration System	Optional	1	Can be used to replace one durable waterbottle. CamelBak or Platypus are popular.	<input type="checkbox"/>
Bowl, Cup, & Spoon/Spork	Optional – NCOAE provides	1 each	Durable, lightweight plastic or metal.	<input type="checkbox"/>
Camp Towel	Optional	1	A pack towel that is compressible, lightweight, quick-drying, made of a microfiber or microfiber blend. For use after sweating or after getting wet.	<input type="checkbox"/>

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Sunglasses	Optional	1	Durable with UV protection.	<input type="checkbox"/>
Prescription Glasses and 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.	<input type="checkbox"/>
Eyeglasses Strap	Optional	1	Good brands are Chums and Croakies.	<input type="checkbox"/>
Trekking Poles	Optional	1-2		<input type="checkbox"/>
Camp chair or sit pad	Optional	1	Lightweight, portable seat for increased comfort when sitting on ground.	<input type="checkbox"/>

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 tablets into the backcountry, even for camera use.	<input type="checkbox"/>
Book	Optional	1	A small, lightweight book for reading.	<input type="checkbox"/>
Small Card Game or Cards	Optional	1	For down time.	<input type="checkbox"/>
Small Stuff Sacks or Gallon Ziplocs	Optional	2-3	Used to organize items in your pack. Lightweight dry sacks are convenient.	<input type="checkbox"/>
Camp Pillow	Optional	1	Should be small, made out of a synthetic material and compressible.	<input type="checkbox"/>

NCOAE Will Supply:

Students share both the use of and the responsibility for the group gear that NCOAE dispenses.

Tents	Group Tarp	Internal Frame Backpack
Sleeping Bag & Stuff Sack	Sleeping Pad	Headlamp
Stoves, Fuel Bottles & Fuel	Maps & Reference Books/Materials	Compass & Whistle
Cooking Gear	Course Food & Spice Kit	Water Treatment
Bowl & Spoon	Nalgene Water Bottles (2)	Dishwashing Supplies
Bear Canisters or Bags	Soap, Hand Sanitizer & Hygiene Wipes	Toilet Paper & Trowel
First Aid & Repair Kit	Group Sunscreen & Bug Spray	Notebook w/Pen or Pencil

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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 will travel mostly off trail, you may be walking through cold streams, and your feet will get wet. You could be in rain or snow for days. You will cross creeks. **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 fine, but unnecessary. Your foot will get wet when the river comes in over the top of your boot. A Gore-Tex liner will slow drying time once the boot is wet.
- 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.

Mid-weight hiking boots:

Asolo: TPS Series, Power Lite Series, Matrix Series, Radiant Series, Energy Series, FSN Series

Lowa: Terek GTX, Tibet Pro GTX

Garmont: Dakota, Synchro Gore-Tex

La Sportiva: Thunder II GTX, Garnet GTX, Omega GTX

Scarpa: Himavan GTX, Mangali GTX, Bhutan GTX, Kailash GTX, Terra GTX

Vasque: Wasatch GTX, Summit GTX, Sundowner GTX, Clarion GTX, Taku GTX, Talus UltraDry

Oboz: Wind River, Sawtooth Mid