

SIET Ski Mountaineering Gear Check List

SKIING EQUIPMENT:

- Skis or Split Board, light weight (2,500 - 3,000 grams (5-7lbs) per pair is ideal)
- Boots with a walk and ski mode, removable liners, warm enough for 0°F and below, comfortable enough for long days of skinning, boot packing, and ice/neve climbing. (~1,200 -1,500 grams per boot or less is ideal)
- Poles
- Climbing skins
- Ski straps (2)

SNOW SAFETY EQUIPMENT:

- Avalanche transceiver (457 kHz, single frequency, digital, w/ 3 antennas, required)
- Avalanche probe (240cm or longer)
- Shovel (flat-backed, metal blade)
- First Aid Kit (personal kit for blisters, small cuts, headaches, upset stomach, etc)
- FM VHF radio (optional)

SNOW STUDY KIT:

- Guides Notebook- 4 5/8" x 7" all-weather paper ("Rite in the Rain" LEVEL, No.311 recommended) or AIARE Fieldbook.
- 2 Mechanical pencils (pens will freeze!)
- Crystal card (optional)
- Magnifying loupe (10x or more is ideal, optional)
- Dial-Stem Thermometers (Centigrade, optional)
- Snow saw or Ruschtblock cutting cord
- Clinometer (or compass with clinometer)

MOUNTAINEERING EQUIPMENT:

- Map(s) (optional)
- Compass
- Altimeter (optional)
- Map ruler, AKA map tool (for measuring distances and slope angles) *Available from Brooks Range Mountaineering <http://www.brooks-range.com> (optional)
- Repair kit (for your specific boots and bindings; consider screws, hose clamps, a multi-tool, bits for your screws, extra ski straps, glop-stopper wax, bolts/nuts, etc.)
- Light ski harness w/ adjustable leg loops, belay loop, and gear loops
- 4 locking, **pear-shaped** carabineers
- 6-8 non-locking carabineers
- ATC Guide or Petzl Reverso or similar
- 1 Cordelette (6mm x 5-6m)
- 4 Sewn slings- (2) 60cm and (2) 120/180cm; one of the long ones should be Dyneema
- 2 Prusiks- 5mm x 1m long
- 1 Ski rope- 8 or 9mm single or half rope 30-45m (optional)
- Small ascender/pulley like Petzl Micro Traxion or Tibloc (optional, strongly recommended)

- 1 ice screw 19-22 (for V threads, optional)
- 1 V thread tool (optional)
- Picket (optional)
- Rescue sled (optional)
- Climbing helmet- light weight foam helmets work best
- 2 Ice Tools- the Petzl Sum'tec is perfect (52cm); Petzl Quarks are great too. Two is ideal, but bring what you have (optional)
- Boot crampons, lightweight, **12 points**, preferably with horizontal points, i.e. the Petzl Sarken or Vasak

OTHER:

- Goggles (both light and dark lenses would be ideal)
- Backpack, 35-45 liter with reliable ski carry straps on outside and ice axe loops
- Backpack, 70-90 liter for hauling gear to/from high camps
- Approach shoes, light weight boots, or sturdy trail running shoes (heavy mountaineering boots are not needed for this course)

The following items are recommended but not necessary:

- Vacuum bottle
- Whippet pole/axe
- Ski crampons
- Small rescue knife

For layers, camping equipment, personal items, etc., see the SIET [Gear List for High Altitude Expeditions](#), which is also pasted below (note that some of it is redundant to what's listed above).

All "optional" items above will be provided by SIET. However, if you plan on launching a personal trip on your own after the course, you'll need to bring these items.

SIET GEAR LIST

FOR HIGH ALTITUDE EXPEDITIONS

PLEASE ARRIVE TO YOUR COURSE WITH ALL OF THE REQUIRED GEAR LISTED BELOW. PLEASE EMAIL IF YOU HAVE QUESTIONS

- * Ice axes, crampons, and harnesses are available for rent. Please contact us 2 months prior to the start date to make a reservation
- * Tents (1 per 2-3 students), cook gear, technical gear, (i.e. ropes, pickets, ice screws, etc.) will be provided. Feel free to bring your own tent for basecamp for extra privacy/alone time.
- * Storage for personal items available in Huaraz. Bring an extra duffel and a small padlock if you plan to use the storage.
- * Temps range from 70F (20C) at base camp to -20F (-30C) on summit attempts. Wind chill can reduce temps to -40F (-40C).

NEED	HAVE	ITEM	DESCRIPTION	OPTIONAL	APPROX. RETAIL
		t-shirt	1-2 cotton and 1-2 synthetic/wool	no	\$20-40
		mid-weight long sleeve	1-2 synthetic or wool zip neck, crew, etc.	no	\$20-80
		light-weight fleece	synthetic, snug-fitting layer, i.e. the Rab Baseline Hoodie	no	\$35-150
		heavy-weight fleece or lightweight down/synthetic insulated jacket	200-300 wt. fleece with a full zip or a lightweight down or synthetic jacket, i.e. the Rab Microlight Alpine Jacket or Rab Strata	no	\$100-250
		heavy-weight parka with down or synthetic fill	full-zip, hooded, down (lightest) or synthetic fill jacket, i.e. the Rab Neutrino Endurance Jacket or Patagonia DAS Parka	no	\$200-380
		wind shirt	superlight (4-6 oz.) breathable wind shirt, i.e. the Rab Cirrus Wind Top	yes	\$40-110
		rain shell (top)	lightweight (10-22 oz), water proof/breathable hard shell (<i>NOT</i> a soft shell). <i>MUST fit over the first 4 layers listed above, with the exception of the parka.</i> i.e. the Rab Stretch Neo Jacket, the Momentum, Volt, or Drillium Jacket.	no	\$90-450
		underwear	6-8 pairs of underwear. Ladies -please bring 2-3 extra <i>cotton</i> underwear in addition to the synthetic	no	\$15-35
		sports bra	ladies- 1-2 synthetic, these can double as a swim suit top	no	\$20-50
		mid-weight bottoms	1 pair synthetic long-john style underwear	no	\$20-50
		heavyweight bottoms	fleece (200 wt. or more), i.e. Rab PS Pants	no	\$50-180
		climbing pants	soft shell pants such as the Rab Fusion or Vapour Rise Guide Pants	no	\$60-180
		rain pants	hard shell such as the Rab Kinetic, Latok Alpine, or Stretch Neo Pants	no	\$90-325
		hiking shorts	synthetic, fast-drying hiking shorts	yes	\$20-50
		cotton pants	for traveling and "in-town"	no	\$10
		bathing suit	for potential trips to hot springs or swimming holes	yes	NA
		medium weight gloves	such as the Rab Alpine or Cascade Glove	no	\$10-20

		1-2 pairs of ice climbing gloves	heavyweight, well insulated, dexterous gloves such as the Rab Ice Gauntlet or Latok	no	\$60-110
		sun hat/baseball cap or visor	for hiking and classes on hot sunny days	no	\$5-10
		wool or fleece hat	medium weight, must fit under helmet	no	\$10-40
		foam butt pad or Crazy Creek	¼ length foam pad (about 14"x18") or Crazy Creek chair (i.e. The Original or the Hex 2.0) for sitting in camp and keeping your butt off the ground	yes	\$2-50
		sleeping bag	0F to -20F mummy style bag, down is preferable, 10F can work with a liner if you are a warm sleeper (email for rental options)	no	\$150-500
		sleeping pad	full-length Therma Rest or thick foam pad	no	\$40-110
		backpack	see above	no	\$180-450
		day pack/summit pack	see above	no	\$60-130
		rock climbing shoes	cragging/bouldering shoes. Sticky rubber approach shoes can work	no	\$60-170
		synthetic socks	4-6 pairs of heavy socks, 1-2 pairs of liner socks optional, 6-10 lightweight hiking socks	no	\$20-40
		stuff sacks	2-3 medium sized ditty bags, waterproof not necessary (for organizing your toiletries, layers, and other gear)	no	\$8-10 each
		plastic trash bags	3-4 large contractor bags to waterproof your backpack, clothing, etc		
		insulated mug	8-12 oz. capacity, the lighter the better	yes	\$2-15
		hydration system	2 liter/quart capacity, at least one 32 oz. bottle. Water bladders are useful for lower altitudes	no	\$12-40
		Aqua Mira (recommended) or Steri Pen or iodine	water treatment/purification (if you go with the Steri Pen option, please bring Aqua Mira or iodine as a back-up). All water treatment should take less than 30 minutes to work	no	\$12-80
		bowl and spoon	~16 oz. bowl with lid & durable spoon. Tupperware bowls are great!	no	\$5-12
		sunblock	2-3 oz. of SPF 50 or higher	no	\$4-10
		lip balm	2-3 with SPF 15 or higher	no	\$1-4
		glacier glasses	dark lenses, sturdy construction, full coverage glasses (that wrap around the sides, no aviators or similar) with a keeper cord (i.e. Croakies or Chums). <i>Must have 100% UV protection.</i> If you have prescription glasses that you will be wearing, we recommend prescription sunglasses or sunglasses that fit over your glasses. Goggles are not a substitute for glacier glasses	no	\$80-160

		prescription glasses/contacts	bring backups!	no	NA
		bandana	1-2 standard lightweight cotton bandanas	yes	\$1-2
		headlamp	LED style headlamp with at least 200 lumens, i.e. Petzl Actik or Tikka. Bring 2 extra sets of batteries	no	\$20-80
		books, iPod, etc.	at your discretion	yes	NA
		personal hygiene products	toothbrush, toothpaste, tampons, wet wipes, hand sanitizer (two 2oz. bottles), ear plugs, and a pack/travel towel (chamois)	no	NA
		consumables/freeze dried meals	3, 6-7oz freeze dried meals, energy bars, gels, cubes, gummies, drink mixes, etc. for summit days. Tea is also recommended	no	NA
		vitamins	daily supplement and immune system boosters (i.e. EmergenC) recommended!	yes	NA
		prescriptions	personal prescription medications. Check the CDC.gov site for suggestions pertinent to the areas you might visit	no	NA
		camera	point and shoot units work great	yes	NA
		personal tent	a small personal tent for basecamp is recommended but optional	yes	NA
		storage duffel or sack	For storing your gear in Huaraz. A padlock for the zippers isn't a bad idea	no	\$10

TECHNICAL GEAR AVAILABLE FOR RENT:

NEED	HAVE	ITEM	OPTIONAL	APPROX. RETAIL
		crampons	no	\$110-200 Rental: \$30
		harness	no	\$30-120 Rental: \$20
		helmet	no	\$40-110 Rental \$20