Group gear that will be provided:

Stoves
Cooking gear
Water treatment systems
Group 1st Aid Kit
Tents
Ropes

To Bring:

Clothing

- **Check to make sure there is NO COTTON in any of your outdoor clothing**
- Shorts: Lightweight Softshell shorts are nice for warm days and hiking into camp.
- Base Layer Top and Bottom: This will be your base layer and should be "lightweight" or "silk weight" synthetic or wool. Cotton is not allowed. If hot temperatures or substantial sun exposure is expected, light colors will feel cooler than dark colors.
- Undergarments. Synthetic or wool underwear.
- 2nd Layer Top: A lightweight fleece/synthetic long sleeve. A chest pocket is a helpful feature of this multi-use layer. Materials: Nylon, micro weave fabrics, fleece, wind stopper.
- Sunshirt- Super lightweight hooded shirt to protect you from the sun. Like the Echo Hoody, Pulse Hoody, or Alpine Glow hoody
- Soft Shell Jacket: A thin, light, stretchy, and breathable layer that is wind and snow-resistant is ideal. This will be your 'action layer' and the outer layer that you spend the most time in. Hoods are highly recommended. Size your jacket to be trim fitting, but large enough to fit over your base and second layers. Materials: Schoeller, Powerstretch, Powerdry, or similar. Recommended: Outdoor Research Ferrosi, Black Diamond alpine Start Hoody, or any other trim-fitting jacket that does not have fleece on the inside.
- Soft Shell Pants: Same features as the Soft Shell Jacket. This will be your outermost layer most of the time for your legs. A thigh pocket is a useful feature for storing small items. Soft shell is better than normal nylon hiking pants, because of the stretch and durability. Materials: Schoeller, Powerstretch, Powerdry, or similar.Recommended: Mammut Courmayeur, Marmot Pingora pant, Black Diamond Dawn Patrol LT, Outdoor Research Cirque pants...etc.
- Hard Shell Pants: Made of a waterproof/breathable material, your lightweight shell bottoms should have full or hip-length side zips. This garment should be extremely lightweight and

packable. A zipper fly is a nice luxury. Materials: eVent, Gore-tex, h2No, or similar. Recommended: Marmot Precip or Minimalist pant.

- Hard Shell Jacket: This layer needs to be waterproof, breathable, and durable. Your shell should be sized to comfortably fit over your other base and mid-layers (minus your insulating layer). Choose the lightest, most packable shell that will still get the job done. Avoid extra pockets (one or two chest pockets is all you need), 3-layer Gore-Tex, and hanging linings-looks like mesh. Your hood should fit over your climbing helmet. Materials: eVent, Gore-tex, h2No, or similar. Recommended: Marmot Precip jacket, Black Diamond Mono point/liquid point, etc.
- Light Synthetic Insulated Jacket with hood. Light synthetic insulated sweater. Materials: Fleece, Primaloft, Recommended: Rab Cirrus Flex Insulated hooded jacket, or Black Diamond Vision Hybrid Jacket, Outdoor Research Helium Insulated Hoodie.
- Down Jacket/puffy with Hood. This will be your warm layer for when it gets cold in the alpine. It needs to be for mountaineering/backcountry travel.... but also a compressible lightweight material so it packs down small. Fill Materials: choose only Down. Shell Materials: Nylon, Epic, eVent. Recommended: Rab Electron Down Jacket, Blackdiamond Approach Hoody, North Face Summit Down Jacket.
- Warm Fleece Glove Liners: You wear these for much of your time on the mountain. They need to be dexterous and comfortable, but not necessarily very insulating. In wet environments such as the Cascades, two pairs are vital for when one pair gets wet. Materials: fleece, Powerstretch, or similar. Recommended: OR Stormtracker, Blackdiamond Arc glove.
- Mid-weight softshell/Leather Gloves: The most desirable glove is one that is comfortable and dexterous, so that it can be worn all day. It should be durable enough (leather palms) to handle ropes, ice axes, and a bit of rock scrambling. It should be waterproof or treated with water proof application. Materials: Soft shell, windstopper fleece, leather or similar. Recommended: Outdoor Research Vert, or Extra Vert Gloves, Rab Fulcrum, Black Diamond Enforcer Gloves
- Beanie Hat/Toque: A thinner warm hat that will fit under your climbing helmet and over your balaclava. Materials: fleece, wool, windstopper, or similar.
- Sun hat: A baseball cap or visor serves well. Models with a "tail" are recommended for increased sun protection.
- Socks: Most climbers prefer to wear a very thin liner sock underneath a thicker hiking/mountaineering sock. Adjust your sock system ahead of time to perfect your boot fit. Materials: wool, synthetic.
- Camp shoes/Sandals

• Approach shoes/ hiking shoes (If you choose to have hiking shoes instead of boots, they need to be made for hiking, normal tennis shoes will not work because they don't have the support needed for the pounds on your back.) Recommended: Salewa Firetail, Wild Fire, or Mountain Trainer hiking shoe, Five10 guide Tennie, La Sportiva TX3 or TX4

Climbing

- Climbing Harness: Choose a harness with adjustable leg loops, and make sure it fits your body when wearing bulky clothing. Must have a belay loop, gear loops, and light padding on the waist. (Examples- Petzl Corax/Adjama or the Black Diamond Technician)
- Climbing Helmet: Light-weight, well-ventilated, and comfortable. Look for a brand that allows a headlamp to be easily put on. Models with a plastic shell are more durable, but are heavier than all foam models. Must be UIAA approved for climbing.
- Belay Device: Bring an auto blocking device like the Petzl Reverso or Black Diamond ATC Guide...Do not bring a Mega Jewel.
- Rock Climbing Shoes: Find an "all around" rock shoe that performs well in cracks and edging. Size them to fit snugly, but comfortable enough to wear awhile. Don't get a beginner's shoe. You are looking for a shoe that will used on edging, crack climbing, and smearing while trad climbing.
- Carabiners: Make sure your locking carabiners are screw gate only....NO twist lock.
- -4 large, pear-shaped (or Münter) locking carabiners (Examples-Petzle Attache, or the Mammut Crag HMS Locking Carabiner, Blackdiamond Vapor Lock).
- -4 other locking carabiners of your choice that are smaller than the pear carabiners (Examples-Edelrid Pure Screw Locking Carabiner, or Black Diamond Positron Screwgate Blackdiamond Lite Forge)
- -5 wiregate non-locking carabiners (Examples- Camp Photon Wire Gate, Trango Phase Carabiner, Blackdiamond mini wire carabiners)
- Belay gloves (fingerless is okay)
- 1 section of 7mm cord: 20ft (Make sure it is 7mm and not 6mm or 8mm)
- 3 Sections of 6mm cord: 20ft, 6ft, and 5ft. (Make sure it is really 6mm!)
- 1 48in (120cm) THIN DYNEEMA sling/runner (10mm thick)
- 1 48in (120cm) NYLON sling/runner
- 1 Quad-length (240cm) dyneema sling
- **Please use nail polish to color code your climbing metal equipment. Don't use electrical tape, it gets all gummed up.

Mountaineering

- Smart Phone : This will be used for downloading mapping software, taking notes, emergencies, communication while on base with other students, trip planning/time calculations, and accessing the programs Google Calendar schedule.
- *Make sure the battery life is good. If your phone can't last a day or two without being charged with light to medium use you will need to update your phone.
- Portable charging port: Small, but able to recharge your phone fully at least twice.
- Glacier Glasses: Choose a model with 100% UVA/UVB protection and side shields. If you have an extra pair, bring them too. Note: Those using contact lenses should also bring a pair of prescription glasses in the event that your contacts or solutions are lost or damaged by freezing. Recommended: Julbo makes nice glasses.
- •Waterproof Mountaineering Boots: These are going to be used in spring and summer conditions so you do not need a really warm boot. Look for a medium/lightweight mountaineering boot with a stiff sole. It MUST be crampon compatible. So it must have a heel welt at least. Please reach out to the OMP leader before buying your boots to make sure you are making a good selection. Recommended boots: La Sportiva Trango Tech Leather Mountaineering Boot GTX, Mammut Kento Guide GTX, Scarpa Zodiac Tech GTX, Asolo Freney XT GV.
- Steel Crampons: Flexible or semi-flexible. **They must be New-Matic.**Older Scottish style <u>strap-on crampons are not adequate</u>. Make sure they fit your mountaineering boot.

Recommended: Grivel G12 crampon New-Matic, Blackdiamond Sabretooth (Clip version), Petzl Vasak 12 point (Lever lock).

Ice Axe

You want this to be relatively short with a technical bent shaft. It is really nice to have one with an adjustable finger pummel. You want the length no longer than 60cm. If you are under 6ft tall going with a 55cm length will work well. It needs to have a steel head/pick and it needs to have an adze instead of a hammer. Leashes will not be used during the course.

Recommend: Black Diamond Venom or Black Diamond Swift, Petzl Sumtec or Summit Evo, or Grivel Air Tech Evo.

- Trekking Poles: At least one pole is required and two are recommended. Even if you don't normally use trekking poles, at least one is necessary to help with balance while carrying heavy packs on mountainous terrain and crossing streams.
- Gaiters Calf/knee height are best. Check the fit of the gaiter to your boot in advance. Materials: Schoeller, Nylon, Cordura. Recommended: OR Crocodiles Gator

• Day/Summit pack: 28-35L capacity (No less and no more). This should be a super lightweight pack with no frame, or a frame you can take out. Recommended: something like the Patagonia Ascensionist 35 pack, or Black Diamond Speed 30, Mountain Hardwear Alpine Lite

Camping Equipment

- Sleeping Bag: A down sleeping bag of 20-25 Degrees Fahrenheit. This should be filled with Down and very compressible to help keep you pack small. It should weight no more than 2 lbs.
- Compression Stuff Sack: Used to shrink your sleeping bag into the smallest size possible. Also good for organizing gear in your backpack
- Sleeping Pad: Bring one pad preferably a lightweight inflatable pad. Closed cell foam pads are suitable, but will add bulk to your pack. Please bring a patch kit for inflatable pads. This should weigh no more than 1.5lbs
- Internal Frame Pack: It should be a 60-75L capacity (if you already have one that is close to this, talk with the program leader, but anything bigger than this is heavy and unnecessary). This will give you room for group gear and extra climbing gear we haul into basecamp. It is best if there are a lot of cinch straps to help you compress what is not being used.
 *features it should have: place to store and secure your ice ax, side pockets, snack pockets on
- Waterproof pack cover or thick garbage bag to pack stuff into inside of backpack
- Spoon: Bigger is better. Lexan is lighter, but metal spoons are more durable.

hip belt are nice, access for easy hydration, compression straps, lightweight.

• Lighter: Bring two. Please be advised, lighters are no longer acceptable in checked baggage when flying.

Misc.

- Passport (Ask School leader if this is needed for traveling to Canada or for the programs outreach location): Make sure it is valid 6 months after the school
- Personal Medical Kit: For sunburn, blisters, cuts, scrapes, etc. Please include duct tape, moleskin, bandaids, blister care supplies, and prescriptions at a minimum. Adventure Medical makes great waterproof kits for 1 and 2 people.
- Personal Toiletries: Bring a toothbrush, toothpaste, floss, hand sanitizer, etc.

- Sunscreen: SPF of at least 30. For the fair skinned, the higher the SPF the better. Stick applicators allow you to apply without exposing fingers. Dermatone makes an effective 1" diameter stick, as well as a translucent zinc oxide lotion. A couple of 1 oz. tubes are adequate. Only your face and, at times, your hands, will be exposed. Several small containers are better than one large one.
- Lip Protection: Bring 2 containers/applicators with the highest SPF available. Zinc oxide also works well (available in pharmacies) as do some models of "chapstick" that have SPF15 or higher.
- Emergency Whistle
- Headlamp: Must be high output LED models. Bring one set of extra batteries. Hand held flashlights are not acceptable. You want a headlamp that is at least 200 Lumens.
- Repair Kit: Thermarest repair kit (for Thermarest pad users), crampon wrench and extra screws, 10 to 20 feet of lightweight nylon cord, small sewing kit, duct tape (can be wrapped on water bottles or trekking poles), pack waist buckle.
- Digital watch
- Bottles/ water bladders-enough to carry at least 3 Liters of water (if you go with a water bladder, you must have at least one 1 Liter bottle). We also recommend a mini Nalgene with cord tied around the neck to take on the multi pitch climbs.
- Pack Towel
- Multi-tool: Leatherman is great.
- Compass: Must be able to adjust declination and have a folding mirror for sighting (something like the Brunton TruArc 15 Compass)
- A Buff (stretchy material that can go over your head and protect your face, neck, ears...etc.)

Optional Equipment

The items listed below are not required, although many are nice "luxury" items that can make your program more enjoyable. Remember that a few ounces here and there add up to extra pounds on your back and knees during your course.

- Handi-wipes: AKA the mountain shower. For personal hygiene and general use.
- Pee Bottle: 1-quart size minimum. A collapsible 2L Nalgene is recommended. Plastic bottles from the store such as Gatorade bottles can work well, but the lids are less secure than a

Nalgene. If you choose to bring one of these, use it carefully and make sure the capacity is adequate. Label your pee bottle well. Women should also bring a pee funnel; Freshette makes a tried and true model.

- Bandana: These have many uses on the mountain.
- Ear Plugs: Defense against snoring tent mates and high winds in the area.
- Insect Repellent: Recommended. If bringing repellent, look for more concentrated repellent in smaller containers. Pack it in a Ziploc bag to prevent contaminating other items in your pack.
- Foot Powder: A very small bottle will allow you to treat your feet daily, keep them dryer, extend the life of your socks, and help you avoid blisters/rashes from chronic wet feet.
- Your own personal backpacking stove (this will be provided for our trips, but you can bring one for your own trips if you want)
- Other climbing equipment: Cams, nuts, ascenders, or other belay devices (the more you have the more you can learn....)
- Grigri- for belaying top ropes and performing rescues
- Micro Traction/Spock-used for creative pulley systems and ascending ropes