

# Mountain Adventure Skills Training

## Required and Recommended Equipment List



The following personal equipment list is required by all MAST students. This list is provided here to give prospective students an idea of what personal equipment is required. A detailed equipment list is sent out to students upon acceptance and will provide equipment descriptions and direction to help with purchasing decisions. Students may wish to delay some purchasing of equipment until program confirmation. This equipment will, with care, last for many years.

- This list does not include standard academic items such as writing materials, binder or folder, etc.
- Students will be required to have a personal laptop.
- This list refers only to technical equipment; non-outdoor-specific clothing and other daily necessities are not included.
- Students are urged to consider the most cost-effective equipment purchases. Look for purchase used, search for sale items, phone several shops and talk to experienced salespeople.

### **Clothing & Wearables – Equipment needed by September 1**

- Waterproof breathable jacket and pants – lightweight and packable
- Pants - softshell or synthetic pants.
- T-Shirt - synthetic or merino wool
- Base layer top & bottom - synthetic or merino wool
- Insulative layers – fleece, wool, down or synthetic layers (no cotton for any outdoor clothing)
- Puffy jacket(s)
- Down parka
- Socks – thin and thick, wool or synthetic or blend
- Sun hat & toques
- Gloves – base, insulative, waterproof and ski gloves
- Sunglasses – high quality glacier glasses for water and snow environments
- Older outdoor clothing
- Watch with alarm for field courses
- Optional, but desirable items include: synthetic shorts, puffy pants & backcountry booties.

### **Camping, Hiking & Mountaineering - Equipment needed by September 1**

- Good quality hiking boots for off trail serious mountain terrain
- Mountaineering boots suitable for use with crampons (can be rented)
- Gaiters – waterproof-breathable fabric, loose fitting, big enough for hiking and mountaineering boots.
- Winter boots
- Compass with sighting mirror, adjustable declination, clinometer and degrees from 0-360°. Recommended models: Suunto MC-2 (G-Global or NH-Northern Hemisphere) or Silva Expedition S
- Four-season sleeping bag - at least -18°C - down is lighter and packs smaller
- Sleeping pad(s) – light model suitable for winter camping. Optional, but desirable item includes a second closed-cell foam insulative sleeping pad for winter camping and ski tour 2.
- Day pack(s) 40 litres with waist and sternum straps – suitable for rock climbing approaches and to strap skis or snow board to. Optional, but desirable item includes ski tour specific day-pack.
- Multi day pack >70 litres - 70-80L recommended
- Bear Spray and Holster
- Fixed-blade knife
- Head lamp
- Water Bottle(s) – 2L capacity. Optional, but desired item includes a thermos for winter.
- Camp eating dishes and utensils.
- Water treatment method, such as chlorine liquid drops or tabs, filter or UV pen.
- Small kits such as a first aid kit for small wounds and blisters, repair kit for easy field repairs and fire-starting kit for emergency consideration.

### **Rock Climbing – Equipment needed by September 1**

- Rock climbing specific harness - with adjustable legs for winter use. Optional, lightweight glacier harness.
- Rock climbing specific helmet
- Rock shoes – snug, but not painful.

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- Belay device – suitable for a variety of rope sizes

### Rock Climbing – Equipment needed by September 1 - Continued

- Accessory cord – 12m of 7mm cord (2x5m and 1x2m)
- Runner / Sewn sling – 120cm
- Non-locking carabiners – 2 identical and not bent gate
- Locking carabiners – 4 total: 1 pear shaped auto locking, 1 triple action with cross-loading prevention sometimes referred to as a captive eye, 2 regular locking

### Backcountry Winter Touring - Ski or Split Board - Equipment needed by December 1

- Option A: Ski-Touring Set Up
  - Alpine touring skis – lightweight skis are preferable.
  - Alpine touring bindings – lightweight tech bindings are preferable.
  - Ski boots – should have good walking sole and *excellent* walk mode.
  - Ski poles
- Option B: Split Boarding Set Up
  - Split board – lighter weight set up is preferable.
  - Split board bindings
  - Snowboarding boots that are appropriate for split boarding and touring
  - Skis (recommended 90-105 mm waist, not twin tip)
  - Collapsible 3-segment ski poles
- Touring / Climbing skins
- Transceiver – digital 3 antennae transceiver is a requirement.
- Avalanche shovel – prioritize large metal blade versions.
- Avalanche probe – recommended 320cm (minimum 280 cm) with CM markings
- Ski helmet
- Ski goggles
- Ski Crampons – required if doing Ski Tour 2
- Optional, but recommended: glob stopper wax for spring touring, ski scraper for multi-day ski-touring and spring conditions, ski specific repair kit.

### Water Field courses – Canoeing, Swiftwater Rescue, Rafting & Kayaking - Equipment needed by Mid-April

- PFD (Personal Floatation Device – designed for canoeing, kayaking or rafting – rescue model preferred)
- Option 1:
  - Drysuit – gortex or breathable fabric is preferable, but better to have a nylon drysuit than a wetsuit. Gender specific drysuits are preferably matched to user. Built in socks in dry suit is recommended. Hood is not recommended.
- Option 2:
  - Wet suit - 3mm farmer john or jane - with long john top and bottom
  - Dry top with neck and wrist gaskets
- 3mm Neoprene gloves, socks & beanie
- Strong sole bootie or water shoe
- Whitewater specific helmet
- Whistle - this will be given to you in your Swiftwater Rescue course if you don't have one.
- Optional, but recommended: water knife

### Mountain Bike – Elective Field Course – Equipment Required by Mid-April

- Mountain bike – full suspension is recommended, but a hardtail can be used. Mountain bikes can be rented in Fernie.
- Bike specific helmet.
- Small backpack

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- Optional, but recommended: specific mountain bike shoes, additional personal protective equipment such as knee and elbow pads.