INTRODUCTION:
- **Most important purchase.** Can make or break an outing
- #1 piece of safety equipment. Most critical relative to your comfort on an outing
- Typically $160 - $200 retail. Wholesale can be ½ price, but fit should be primary concern

ATTRIBUTES:
- Outer sole: Vibram or proprietary. Durability vs. traction.
- Support: Shank: Metal, Plastic, Wood
- Mid sole: EVA, polyurethane, rubber (cushioning, shock absorption)
- Inner sole: Foot bed – manufacturer’s or after market (Superfeet)
- Welt: Modern (molded), Norwegian (stitched)
  - Might be step in crampon compatible (not required)
- Upper: Leather: Full grain (shiny), Nubuck (suede)
  - Composite uppers (leather/fabric) are not acceptable for this course
  - Minimize seams (leakage paths)
  - Fully gusseted tongue (minimizes leakage over the top of the boot)
- Lining: Cloth (shorter break in), Leather (longer break in, more durable)
  - Storm sock: Goretex, Symptex, proprietary. Can improve water proofing
- Cut: High-cut (most support), Mid-Cut (acceptable), Low Cut (unacceptable)

TYPES OF BOOTS:
- Plastic mountaineering expedition boots
  - Look like ski boots.
  - Wrong boot for this course
- Leather / cloth modern mountaineering expedition boots
  - Newer/modern version of the above
  - Wrong boot for this course although usable if broken in
- Full shank leather mountaineering boots
  - No bend in sole, step-in crampon compatible
  - Wrong boot for this course although usable if broken in
- ¾ shank leather mountaineering boots
  - Minimally bendable sole. Step in crampon compatible.
  - Good boot for this course. Also usable for basic mountaineering (after course)
- ¾ shank leather backpacking boots -
  - Minimally bendable sole. No provisions for crampons
  - Correct boot for this course. Can be used for basic mountaineering
- ½ shank leather backpacking / hiking boots
  - Moderately bendable sole. Lighter weight
  - Minimally acceptable boot for this course. Review with an instructor
- Leather / cloth composite hiking boots
  - Moderate to easily bendable sole. Light weight.
  - Unacceptable for this course
SIZING:
- Go to an expert, where there’s a selection, and when you have time
- Try on boots in the evening when feet are swollen from the days use
- Pick your socks first. Try on boots with the socks you’ll be wearing in the field
- Start \( \frac{1}{2} \) to 1 full size larger than shoe
- With laces loose and foot forward, two stacked finger should fit behind heal
- Make sure you can wiggle your toes.
- With boots laced securely there should no or minimal heal slippage while walking
- Stomping and scuffing the boots on a down hill should not cause toes to hit front
  - If so try next \( \frac{1}{2} \) size larger
- **Wear boots around store for at least an hour**, up and down stares, squat, use incline board, toe kick
  - Look for fit, abrasions, hot spots, pinching, sloppiness – any sign of discomfort
  - Any discomfort will be magnified 100 times in the field
- Try aftermarket insoles such as Superfeet

BREAK-IN:
- Modern boots are made to be worn right out of the box
  - Forget any old wives tales you’ve been told. Do not wet/soak the boots
  - Most still require some “break-in”.
- Wear to work and play for several days
- **Start hiking**. Increase the length of hikes before a big outing

WATERPROOFING:
- Follow the manufacture's recommendation. Ask the person selling the boots
- Waterbased aqueous (nikwax – looks like a tube of toothpaste) is the standard
- Spray on sealants (Techron DWR – comes in a spray can) are very good at sealing the leather
- Bees wax doesn’t seem to hold up over the long haul
- Waterproof out of the box, or before hiking (while they’re still clean)
- Clean before waterproofing (nylon brush, damp cloth) if used
- **Water proof multiple times out of the box, then again after each harsh use**

SOCKS:
- Buy two pairs of high quality socks. Same place you got the boots
- **NO COTTON**. Wool such as “Smartwool” or synthetics such as “Thorlo” are superior
- Thicker is probably better
- Modern socks “do not require” liner socks.
  - Many people wear them anyway to minimize blisters
- Liner socks are usually very thin nylon or polypropylene

BOOT MAINTAINANCE:
- **Boots should be cleaned and dried after each hike**
- Remove laces and clean if necessary
- Remove insole
- Brush off any dirt
- Clean with damp cloth or brush and water
- Prop boot open and leave in warm dry area until it **dries completely**