



Foothills Compressed Alpine Scrambling Course 2020 Student Handbook



Name _____

Special thanks to Seattle Scrambling for authoring the original version of this fantastic handbook.

On the cover

Photograph by Mushtaque Silat

Descending Mt Ruth in Mt Rainier National Park, heading east back to the White River Campground – May 2017

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- If you have a question about this course, please contact us at FOOTHILLS.SCRAMBLING@GMAIL.COM
- If you have a specific question about a course field trip, contact the leader of that field trip shown on the website or foothills.scrambling@gmail.com.
- If you have general questions about The Mountaineers, email the club: info@mountaineers.org

WELCOME

We look forward to helping you successfully complete this course and pursue a lifetime of adventure in the mountains. You'll learn how to safely travel off-trail and scramble to a wide variety of mountain summits. Scrambles are typically strenuous and involve moving over steep snow, rock, and through brush. The skills you develop and the experience you gain will give you a sound and safe passport to the wilderness. This course is a program of classroom and field instruction designed to prepare you with the skills and experience required to safely scramble countless mountains here in the Pacific Northwest.

What's a scramble

- Off-trail travel over steep rock and snow and through forest with occasional thick brush
- Significant elevation gain with a destination of a mountain summit
- Rated 1 to 5 according to technical and strenuous difficulty
- Pace ranges from slow to fast, varies from trip leader to trip leader
- Ropes aren't used but scramble leaders carry one for emergency use only
- All participants have completed and passed the required Scrambling Course instruction, so that everyone has the required basis of safety and technical skills
- Led by scramble leaders who are approved by The Mountaineers to have the appropriate qualifications and experience

What you'll learn

- Wilderness skills – off-trail route finding, mountain weather, avalanche safety, low-impact recreation, etc.
- Snow skills – ice axe techniques (self-arrest, self-belay, etc.), kicking steps, plunge stepping, glissading, etc.
- Rock skills – three points of contact, friction movements, downclimbing technique, protected downclimbing, etc.
- Wilderness Navigation – separate course offered by The Mountaineers – topics include how to take and locate bearings off-trail, how to follow bearings off-trail, how to read topographic maps, how to take and plot bearings on a map, route planning, etc.
- Wilderness First Aid – separate course offered by The Mountaineers – learn skills to handle medical situations in the wilderness using limited supplies and gear
- Low-Impact Recreation – separate badge – learn about Leave No Trace practices
- Stewardship – separate badge - a way to give back to our outdoor places. Stewardship trips are focused on repairing trails, maintaining access points, restoring shorelines, and more.

Keys to success

- Be prepared – bring all required gear to field trips and scrambles, focus on mental preparation as well
- Know your limits – be responsible and sign up for scrambles with the appropriate difficulty for your conditioning and comfort level
- Work as a team – work together and stay with the group and watch for others who may need your help
- Conditioning – physical fitness is necessary for safety and enjoyment
- Read the course textbook – not all necessary information is covered in the course workshop and field trips so read the specified sections in the course textbook "Mountaineering Freedom of the Hills" published by The Mountaineers
- Ask questions – your leaders want you to succeed – seek help and information when needed
- Be committed – scrambling requires a positive mental attitude as well as time and effort
- Tread lightly – The Mountaineers is committed to conserving wild places – be environmentally responsible
- Not a guide service – The Mountaineers is a club, you will learn and practice from experienced volunteer instructors and you'll become increasingly self-sufficient – after course completion, students are responsible for their own and the group's safety – always think of yourself as an assistant leader

COURSE DATES

Course Intro, Gear Workshop & Avalanche Awareness	<input type="checkbox"/> Sat March 14
Conditioning hikes (at least one recommended)	<input type="checkbox"/> Wed March 25 <input type="checkbox"/> Wed April 1 <input type="checkbox"/> Tues April 7 <input type="checkbox"/> Sat April 11
Snow Skills Field Trip – Snoqualmie Pass	<input type="checkbox"/> Sat April 18
Rock Scrambling Field Trip – at Little Si or Dirty Harry’s Balcony	<input type="checkbox"/> Sun April 19 <input type="checkbox"/> (Back up date for poor weather will be Sat April 25. Please hold this date on your calendar, too.)
Experience Field Trip – at Bean Creek Basin (this will be a one-day field trip; reserving 2 days gives us an option for weather)	<input type="checkbox"/> Sat-Sun May 2-3

Wilderness Navigation Course

- Don’t delay. **Sign up as soon as possible to get this requirement completed before the Experience Field Trip.** The courses do fill. Foothills, Tacoma, Seattle, and other branches also offer Wilderness Navigation courses. Keep an eye on the Mountaineers website for 2020 course postings.

Navigation Workshop/Lectures (some online)	<input type="checkbox"/>
Navigation Field Trip	<input type="checkbox"/> NEEDS to be completed before the Experience Field Trip on May 2.

Wilderness First Aid

- Don’t delay. **Sign up as soon as possible to get this requirement out of the way.** The courses do fill. Foothills, Tacoma, Seattle, Kitsap and other branches also offer Wilderness First Aid courses. Keep an eye on the Mountaineers website for 2020 course postings.

First Aid classroom	<input type="checkbox"/> One of the many dates between now and Oct 2020
First Aid scenarios	<input type="checkbox"/> One of the many dates between now and Oct 2020

COURSE SEQUENCE

- **Highlighted** sections are Scrambling Course workshops and field trips

Wilderness Navigation Course	Open for signup soon and required ASAP to continue with this course – for more info see the "Graduation Requirements" section
Wilderness First Aid Course	Has a rolling signup throughout the year, required to graduate on time – for more info see the "Graduation Requirements" section
Low-Impact Recreation badge	Achieve the Low-Impact Recreation badge by watching a few very short videos and then passing a quiz. A good one to do early and knock out of the way.
Conditioning Hikes	Many activities are scheduled for fitness, look for trips with 2000+ ft of elevation gain and a moderate to fast pace
Stewardship Badge	Activities are posted throughout the year. A good one to do early and knock out of the way.
Intro Lecture	Course intro and gear workshop
Buy required gear	All required gear must be purchased by the Field Trip weekend – also note that some gear can be rented for the course: items such as ice axe, climbing helmet, crampons, etc.
Buy crampons	Required by the Snow Field Trip (buy your mountaineering boots first) – if renting them for the course from an outdoor store, note that you'll need them twice (at the Snow Field Trip and the Experience Field Trip)
Sign up for snow scrambles	Sign up for snow scrambles (not winter scrambles) on the website as soon as possible since the snowpack is unpredictable. You can't go on snow scrambles until after your Snow Field Trip but you can sign up for them prior to that.
Snow Field Trip	At Snoqualmie Summit
Sign up for rock scrambles	Sign up for rock scrambles on the website. You can't go on rock scrambles until after your Rock Field Trip, but you can sign up for them prior to that.
Rock Field Trip	At Little Si or Dirty Harry's Balcony
Experience Field Trip	At Bean Creek basin which is near the Beverly Campground, about 25 miles north of the town of Cle Elum WA
At least 3 scramble summits	Must include at least one snow scramble and at least one rock scramble. Your 3rd scramble can be rock or snow.
Graduate	Notify us when you're done with all of the course requirements to achieve your Alpine Scrambling Course badge – as a graduate you can now sign up for winter scrambles (November–March) – see the "What's Next" section of this handbook for more things to do

GRADUATION REQUIREMENTS

- If you have questions then email foothills.scrambling@gmail.com
- **October 31** is the deadline, but don't wait until then. Please let us know as soon as you're able to graduate
- Email us with the below info when you've completed all of the requirements to graduate listing the successful scrambles

Scrambling Course

<u>Workshops</u> <ul style="list-style-type: none"> ▪ Gear and Avalanche Workshop 	Gear <input type="checkbox"/>	Avalanche <input type="checkbox"/>	
<u>Field trips</u> <ul style="list-style-type: none"> ▪ All 3 field trips 	Snow <input type="checkbox"/>	Rock <input type="checkbox"/>	Experience <input type="checkbox"/>
<u>3 scramble summits</u> <ul style="list-style-type: none"> ▪ Must include at least one <u>snow</u> scramble and at least one <u>rock</u> scramble ▪ Experience Field Trip summits do not count ▪ See the "FAQ" section of this handbook for more info about which scrambles count toward graduation 	(Snow)		Peak / Date / Leader's name
	(Rock)		Peak / Date / Leader's name
	(3rd scramble)		Peak / Date / Leader's name

Required badges

<u>Basic Navigation Course badge</u> <ul style="list-style-type: none"> ▪ See the next page for more information 	Workshop/Lecture date / Field Trip date	
<u>Wilderness First Aid Course badge</u> <ul style="list-style-type: none"> ▪ See the next page for more information 	Classroom dates / Scenario date	
<u>Low-Impact Recreation badge</u> <ul style="list-style-type: none"> ▪ See the next page for more information 	Low-Impact <input type="checkbox"/>	
<u>Stewardship</u> <ul style="list-style-type: none"> ▪ See the next page for more information 	Stewardship <input type="checkbox"/>	

Pending first aid

- If your only remaining requirement is Wilderness First Aid, notify us that you've completed the Scrambling Course and add the note "Pending first aid"
- Once you have the Wilderness First Aid Course badge on your profile, let us know to be officially graduated

BADGES REQUIRED TO GRADUATE

Wilderness Navigation Course badge

- This is a separate course offered by The Mountaineers
- **Required by the Experience Field Trip** to continue with the Scrambling Course – there's a limited number of course dates available and you will need to complete the course before the Experience Field Trip– register for it ASAP
- Course topics include how to take and locate bearings off-trail, how to follow bearings off-trail, how to read topographic maps, how to take and plot bearings on a map, route planning, etc.
- When registering for the course, especially when it's with another Mountaineers branch, make sure the course description says graduates will receive the Basic Navigation Course badge
- More information:
<http://mountaineers.org/learn/navigation>

Wilderness First Aid Course badge

- This is a separate course offered by The Mountaineers, typically two full days of classroom work followed by an evening scenario session
- Learn skills to handle medical situations in the wilderness using limited supplies and gear
- When registering for the course, especially when it's with another Mountaineers branch, make sure the course description says graduates will receive the Wilderness First Aid Course badge
- Equivalency may be granted if you have one of these certifications: WFR, WEMT, RMAP, etc. – contact First Aid Equivalency or info@mountaineers.org with questions
- More information:
<http://mountaineers.org/learn/firstaid>

Stewardship badge

- Day of trail work with an organization such as wta.org – some options are trail work, habitat restoration, tree planting, invasive species removal, etc.
- An easy way to find an event is The Mountaineers website (it must show the "Stewardship Credit" badge):
mountaineers.org > Explore > Find Activities > "Stewardship" search filter checkbox
- If you're not doing it through The Mountaineers then the most common activity is trail maintenance – after you've completed your volunteer time just contact Mountaineers Membership at info@mountaineers.org to get the badge – one easy method to find an activity is: <http://wta.org/volunteer>
Note that doing two days with the WTA on forest service land will get you a free annual NW Forest Pass
- Some other volunteering websites:
wta.org/volunteer | earthcorps.org | mtsgreenway.org | wawild.org

Low-Impact Recreation badge

- Watch a few very short videos and then take a quiz to achieve the Low-Impact Recreation badge
- For the videos and quiz see The Mountaineers website:
mountaineers.org > Conserve > Low-Impact Recreation Skills > watch videos > take quiz

CHECKLIST – THINGS TO DO NOW

- Do not buy gear yet** since you'll receive a lot of information at the Gear Workshop to help you make better buying decisions
- Sign up for the Wilderness Navigation Course if you haven't already – **required by the experience Field Trip** to continue with the Scrambling Course – there are a limited number of course dates available– register for it ASAP
- Sign up for the Wilderness First Aid Course if you haven't already
- Achieve the Low-Impact Recreation badge by watching a few very short videos and then passing a quiz. See the "Graduation Requirements" section of this handbook
- Purchase or borrow the course textbook "Mountaineering Freedom of the Hills" 9th edition published by The Mountaineers
- Start conditioning, see the "Conditioning" section of this handbook
- In your mountaineers.org profile, update your name to what you prefer to be called (like Jen instead of Jennifer)
- In your mountaineers.org profile, add a photo – it doesn't need to be a headshot--it can be anything you'd like
- In your mountaineers.org profile, update your default carpool preferences. This will make arranging carpooling a lot easier this summer when going on scrambles.
- In your mountaineers.org profile, update your emergency contact person
- Discuss with your emergency contact person the procedure for handling a late return. See the "Emergency Plan" section of this handbook
- The best way to stay in touch with what's going on is to join our activity Facebook group – get notifications of last minute openings on scrambling trips, join practical discussions about scrambling gear, see inspiring photos of beautiful peaks you didn't know existed, see current conditions in our mountains such as how the snow level is doing, get notification about course events, etc. – join here:
Search within Facebook for "Seattle and Foothills Alpine Scrambling – The Mountaineers"
Or use this link: <http://facebook.com/groups/AlpineScramble2013>
- The Mountaineers has a Facebook group called "Mountaineers Marketplace" for buying and selling used gear, this is a great way to find gear for cheap:
Search within Facebook for "Mountaineers Marketplace"
Or use this link: <http://facebook.com/groups/377304859047281>

CHECKLIST – GEAR WORKSHOP

In advance

- Do not buy gear specifically for this workshop since you'll receive a lot of information at this workshop to help you make better buying decisions
- Review the "Gear" sections of this handbook so that you're familiar with the needed gear, and have questions ready for your workshop instructors
- Reading assignment in "Mountaineering Freedom of the Hills" 9th edition:
 - Chapter 1 – First Steps
 - Chapter 2 – Clothing and Equipment
 - Chapter 4 – Physical Conditioning
 - (optional) Chapter 5 – Navigation
 - Chapter 7 – Leave No Trace
 - Chapter 8 – Access and Stewardship

Notes

- If you have any questions, email: foothills.scrambling@gmail.com
- Please arrive 5–10 minutes early
- At course activities we ask everyone to set their phone to silent
- We will size you for an ice ax.

Gear to bring

- If you have any existing gear and you're not sure if it's appropriate for this course then please bring it so you can ask the instructors questions about it
- Appropriate clothing – you'll be inside the building for the entire workshop, mostly sitting down
- You'll tie a harness around your waist and between your legs so please don't wear a skirt/dress/kilt

Items given to you at the workshop

- Protected downclimbing kit (webbing, cord, carabiner)

CHECKLIST – CONDITIONING HIKE(S)

In advance

- Read the "Conditioning" section of this handbook
- Read the online Leader Notes and also the email from the trip leader for more trip information
- (optional) Arrange carpooling the week prior using the roster tab on the activity page
- Check the mountain weather to help with gear decisions, see the "FAQ" section of this handbook on weather

Notes

- If you have any questions, email the hike leader
- Conditioning Hikes are optional, but strongly recommended
- There's no requirement for how much your backpack should weigh. These Conditioning Hikes are just to help you know where your conditioning level is at
- Bring as much weight as you think is appropriate; see the "Conditioning" section of this handbook for details
- Pack the night before. Don't wait until the morning
- If you show up without the proper gear, you may not be able to participate
- Tip: A nice method to increase backpack weight is to carry containers of water (8.4 pounds/gallon), then before descending dump the water to lighten your backpack

Gear to bring

- Appropriate clothing – you'll be outside for the entire hike, rain or shine, plan on cold and wet conditions
- As many of the items you already own in the "Required Gear" and "10 Essentials" sections of this handbook
- Backpack
- Hiking boots are okay but if you have mountaineering boots then bring them to help break them in and to get your feet used to them, plus they weigh more than hiking boots so it's more similar to an actual scramble
- Headlamp with batteries and also extra fresh batteries, since most Conditioning Hikes are in the evening
- Your technical gear is not needed (ice axe, climbing helmet, crampons, etc.) but it's okay to bring it to add more weight to your backpack
- Food/snacks/water
- Bring whichever parking pass is required (NW Forest Pass or Discover Pass)

CHECKLIST – SNOW FIELD TRIP

What to expect

- Manage gear and clothing options
- Safely move up and down steep snow, including glissading
- Practice all ice axe arrest positions
- Use crampons
- Introduce basic avalanche concepts including a snowpack demo
- Construct emergency shelters

In advance

- Read the "FAQ" section of this handbook
- Reading assignment in "Mountaineering Freedom of the Hills" 9th edition:
 - Chapter 16 – Snow Travel and Climbing
 - pages 330–353
 - pages 360–365
 - Chapter 17 – Avalanche Safety
 - Chapter 27 – The Cycle of Snow
- (optional) Arrange carpooling the week prior using the roster tab on the activity page
- Read the online Leader Notes and also the email from the trip leader for more trip info and a printable map
- Write your name on your climbing helmet so the instructors know who you are, and leave it on for the remainder of this course – place a piece of duct tape on the front and back of your helmet then write your first name on them with a sharpie
- Make sure your crampons fit tightly over your mountaineering boots.
- Check the mountain weather to help with gear decisions. If you're driving, also check the road conditions to see if tire chains are needed. See the "FAQ" section of this handbook on weather

Notes

- If you have any questions, email: foothills.scrambling@gmail.com
- This event occurs at Snoqualmie Pass WA, about 1.5 hours from Seattle
- Be prepared for a full day. There is no defined end time, but it should be around the time it starts getting dark. We recommend you not make plans for the evening after the field trip since the field trip may run late
- If you show up without the proper gear you may not be able to participate
- Pack the night before. Don't wait until the morning

Gear to bring

- Appropriate clothing – you'll be outside for the entire field trip, rain or shine. Plan on cold and wet conditions
- All of the items in the "Required Gear" and "10 Essentials" sections of this handbook
- Mandatory gear** or you won't be able to participate: Mountaineering boots, climbing helmet, ice axe, crampons, sunglasses, 10 Essentials
- Waterproof jacket and pants. If you have an old set, bring those instead since they may get damaged
- Gloves since your hands will get wet from the snow. Waterproof or water resistant gloves work great and a dry backup pair is strongly recommended
- Gaiters are not required but are very strongly recommended to help keep snow out of your boots and protect your legs from sharp crampon edges.
- Dry clothes for the drive home, see the "Suggested Gear" section of this handbook on bringing a car kit
- See the "Suggested Gear" section of this handbook for other items you may want to bring
- Food/snacks/water

CHECKLIST – ROCK FIELD TRIP

What to expect

- Ascend off-trail moving over rocky terrain
- Descend using downclimbing and arm rappel skills

In advance

- Reading assignment in "Mountaineering Freedom of the Hills" 9th edition:
 - Chapter 6 – Wilderness Travel
 - Chapter 12 – Alpine Rock Climbing
 - pages 227–236
 - pages 248–251
 - Chapter 23 – Safety
 - Chapter 28 – Mountain Weather
- Arrange carpooling the week prior. Space is limited in the parking lots, so please carpool.
- Sign up for rock scrambles on the website. You can't actually go on rock scrambles until after your Rock Field Trip but you can sign up for them prior to that – if a scramble is full then you can join the waitlist. Very often participants will cancel and you'll get on the scramble
- Read the online Leader Notes and also the email from the trip leader for more trip information
- Make sure your name is on your climbing helmet
- Check the mountain weather to help with gear decisions, see the "FAQ" section of this handbook on weather

Notes

- If you have any questions then email: foothills.scrambling@gmail.com
- This event occurs at Little Si or Dirty Harry's Balcony, about 1 hour from Seattle
- Please arrive early, be ready to start (with boots and backpack on) about 15 minutes prior to the start time
- Be prepared for a full day, there is no defined end time but it should be around the time it starts getting dark
- We recommend you not make plans for the evening after the field trip since the field trip may run late
- Pack the night before, don't wait until the morning
- If you show up without the proper gear you may not be able to participate
- At course activities we ask everyone to set their phone to silent
- We're really impressed that you've read this far. Let us know by drawing a smiley face next to your name on your climbing helmet – please keep this a secret and don't tell other students.

Gear to bring

- Appropriate clothing – you'll be outside for the entire field trip, rain or shine, plan on cold and wet conditions
- All of the items in the "Required Gear" and "10 Essentials" sections of this handbook
- Mandatory gear** or you won't be able to participate: Mountaineering boots, climbing helmet, ice axe, protected downclimbing kit
- See the "Suggested Gear" section of this handbook for other items you may want to bring
- Do not bring jewelry, especially rings since they can get wedged between rocks and cause you to lose a finger
- Gaiters are not required but are recommended to keep rocks and dirt out of your boots, short gaiters work great on rock
- Discovery Pass for drivers
- Food/snacks/water

CHECKLIST – EXPERIENCE FIELD TRIP

What to expect

- Demonstrate all skills learned in this course while safely moving off-trail over snow and rock to reach a summit or two
- Demonstrate ice axe arrest and glissading skills
- Demonstrate navigational proficiency
- Practice crampons techniques on hard snow
- Cross a stream safely
- Hopefully provide your small-group instructors with tasty treats :)

In advance

- Read the "FAQ" section of this handbook on the Experience Field Trip and then decide if you're spending the night at a campground
- If you plan to camp at the Experience Field Trip, but you don't own a tent, then coordinate with another student who's looking for a tent-mate. It may make sense to carpool with them, too.
- Arrange carpooling the week prior. (strongly recommended) Parking at the trailhead is very limited.
- Read the online Leader Notes and also the email from the trip leader for more trip information
- Check the mountain weather to help with gear decisions, see the "FAQ" section of this handbook on weather

Notes

- If you have any questions, email: foothills.scrambling@gmail.com
- This event occurs in the Bean Creek basin which is near the Beverly Campground, about 2.5 hours from Seattle
- Please arrive early, be ready to start (with boots and backpack on) about 15 minutes prior to the start time
- Plan on getting to the trailhead about 45 minutes early in case you get lost trying to find the trailhead
- Be prepared for a full day. There is no defined end time, but it should be around the time it starts getting dark
- Do not make plans for the evening after the field trip since the field trip may run late
- If you show up without the proper gear you may not be able to participate
- Pack the night before. Don't wait until the morning
- At course activities we ask everyone to set their phone to silent
- Now might be a good time to start getting notifications of new trip listings. See the "FAQ" section of this handbook on new trip email notifications

Gear to bring

- Appropriate clothing – you'll be outside for the entire field trip, rain or shine, plan on cold and wet conditions
- Crampons
- Bring everything you would for a normal scramble (by now you should know what gear you need)
- There's no water at any of the campgrounds in the area, so bring extra if you plan to camp
- Stream crossing shoes, see the "FAQ" section of this handbook on the Experience Field Trip logistics
- If you plan to camp, bring overnight gear (sleeping bag, air pad, tent or tent plans, etc.)
- Directions to the trailhead/campsite since there's no cell service past the town of Cle Elum
- Parking pass (NW Forest Pass) if you're driving
- Do not bring jewelry, especially rings since they can lead to finger injuries
- Food/snacks/water

POPULAR SCRAMBLES

- This is a small sample of the popular scrambles which may be a good starting point for your adventures
- Each year there are 250–300 scrambles led through The Mountaineers, and over every week of the year
- Scrambles are offered by other Mountaineers branches – you can sign up for any of them unless the leader has specified otherwise
- Begin with a moderate scramble and slowly build up to increasing difficulty
- Many summer scrambles can be snow or rock. It depends on the conditions, see the "FAQ" section of this handbook on categories of scrambles
- Scrambles on the website are rated with S & T ratings for strenuous and technical difficulty, see the "FAQ" section of this handbook on S & T rating
- Read about [every Mountaineers scramble destination](#) in more detail (mileage, difficulty, etc.) at: mountaineers.org > Explore > Find Routes & Places > filter on "Scrambling"

Moderate

Mt Ararat	Snow or Rock
Bean Peak	Rock
Camp Muir & Anvil Rock	Snow
Copper Mtn & Iron Mtn (Mt Rainier)	Rock
Cowboy Mtn	Snow
Earl Peak	Snow or Rock
Mt Ellinor (route 1)	Snow
Esmerelda Peak (west peak)	Rock
Hawkins Mtn	Snow or Rock
Humpback Mtn	Snow or Rock
Iron Peak & Teanaway Peak	Snow or Rock
Lichtenberg Mtn	Snow or Rock
Mt Pilchuck (east ridge)	Snow or Rock
Putrid Pete's Peak	Rock
Snoqualmie Mtn	Snow or Rock
Vesper Peak	Snow or Rock

Difficult

Barrier Peak & Tamanos Mtn	Rock
Cashmere Mtn	Snow or Rock
Grindstone Mtn	Snow or Rock
Gothic Peak	Snow or Rock
Hibox Mtn	Rock
Kaleetan Peak (south ridge)	Rock
Mt Ruth (Mt Rainier)	Snow
Silver Peak & Tinkham Peak & Abiel Peak	Rock
Wedge Mtn	Rock

Challenging

Mt Baring (NW ridge)	Snow or Rock
Governors Ridge & Barrier Peak	Rock
Merchant Peak	Rock
Mt Stuart	Snow or Rock
Volcanic Neck	Rock

CONDITIONING

Be prepared

- Scrambling is a very strenuous activity
- Be as fit as possible to enjoy this course to maximize your opportunity for success
- Be prepared to carry a 20–25 pound backpack for 6–10 miles while climbing 2500–5000 feet of elevation
- People who do a significant amount of running sometimes discover they aren't as prepared as they thought for scrambling – runners use different muscles, don't wear heavy backpacks, and don't usually gain elevation
- Inadequate conditioning can contribute to a loss of alertness and an inability to respond properly to the demands of the environment, this could prevent a group from reaching the summit or jeopardize party safety

Start now

- Start your conditioning right now, go out and hike up some local trails:
Tiger Mtn, Tiger Mtn Cable Line, Mount Si, Rattlesnake Ledges, Mailbox Peak (when no snow), etc.
- Get out regularly
- Work to build leg strength, agility, flexibility, and balance
- The best way to get into scrambling shape is to hike while gaining elevation and carrying weight
- One idea may be going out two times a month, increasing to three times a month, then maybe four
- If your calendar is full, then a great time to improve your conditioning may be before or after your job (bring your headlamp with batteries and also extra fresh batteries since it may be dark) – maybe go initially while it's light out so you can learn the trail
- If you can't get outside then one option is to wear a heavy backpack on a stair machine or high incline treadmill
- If you're unable to easily get to the mountains, there are urban locations in Seattle with lengthy outdoor staircases which you can do laps on. You can find them with a google search
- Tip: A nice method to increase backpack weight is to carry containers of water (8.4 pounds/gallon), and before descending, dump the water to lighten your backpack

Goal

- You're in decent shape if you're able to hike the Mount Si trail to the base of the summit "haystack" (4 miles and 3200 feet of elevation) in 2–2.5 hours carrying a 20–25 pound backpack – less than 2 hours is great, and more than 2.5 hours means you should work on your conditioning
- Build up stamina rather than just racing to the top as fast as you can. Not being exhausted on the summit is more important than the amount of time it took to get there
- Work on improving your time to the summit with the same backpack weight, or you can work on slowly increasing your backpack weight with the same summit time – both methods are effective

Conditioning hikes

- Sign up for Conditioning Hikes
- Go on private hikes with friends

EMERGENCY PLAN

Overview

- Scrambles can be long and strenuous and are done with safety as the foremost concern, however accidents do happen so you should have an emergency contact person just in case
- Occasionally a scramble may be very late getting home or may be forced to spend an unplanned overnight in the mountains and not return until the following day – do not promise friends and loved ones that you'll be home by a certain time, and don't commit to something the evening after a scramble
- On rare occasions things go wrong in the backcountry and The Mountaineers may call your emergency contact person to pass along important updates about your safety and whereabouts
- The Mountaineers has an Emergency Line available 24/7 for calling and reporting overdue trips – your emergency contact person should use this, they should **never call 911** directly – this is to prevent multiple people all calling 911 about the same incident – the people answering the Mountaineers Emergency Line will coordinate action with 911 and rescue authorities

Your steps

- Update your emergency contact person on the website – it should not be a person you scramble with
- When going on scrambles with The Mountaineers let your emergency contact person know your latest return time which is always **noon the day after your scramble** – for example, if you're going on a Saturday scramble then tell them to call the Mountaineers Emergency Line if you're not back by Sunday at noon
- It's your responsibility to educate your emergency contact person of this procedure, and make sure they know not to call 911 – give them the cutout below or send them an email
- If you're on a trip and there's a safety incident then you should definitely call 911 – if your cell phone shows that it has no reception, still call 911 since all cell phones will send a boosted signal if it's 911 increasing your chance of reaching them – do not call the Mountaineers Emergency Line in this case
- After your scramble let your emergency contact person know you've returned safely

Your emergency contact person's steps

- If you're not back by noon the day after your scramble, your emergency contact person should call the Mountaineers Emergency Line open 24/7 at **206-521-6030**. They should **never call 911** directly.
- The Mountaineers Emergency Line phone number can also be found on The Mountaineers website: mountaineers.org > "Contact Us" link at the bottom of the page



The graphic is a rectangular cutout with a black top section and a grey bottom section. On the left side of the black section is a white square containing a black 'M' with a mountain range silhouette above it. To the right of the 'M' is the text 'If a Mountaineers group is late' in white, followed by 'DO NOT CALL 911' in white, flanked by horizontal lines. The grey section contains the text 'Wait until noon the next day before calling the MOUNTAINEERS EMERGENCY LINE' in white, with 'MOUNTAINEERS EMERGENCY LINE' in a larger font. Below this is a white box containing the phone number '206.521.6030' in large black font, and to its right, a black box containing the text 'AVAILABLE 24/7' in white.

M If a Mountaineers group is late
— DO NOT CALL 911 —

Wait until noon the next day before calling the
MOUNTAINEERS EMERGENCY LINE

206.521.6030 AVAILABLE
24/7

GEAR

Shopping tips

- Do not buy new gear until after you've attended the Gear Workshop since you'll receive a lot of information at the Gear Workshop to help you make better buying decisions
- Read chapter 2 ("Clothing and Equipment") in the course textbook "Mountaineering Freedom of the Hills"
- Some gear can be rented such as crampons, ice axe, climbing helmet, etc.
- There are many options for each piece of gear so decide what works best for you based on multiple factors such as cost, weight, availability, features, etc.
- Ensure proper fit and comfort since you may wear this gear all day
- Members of The Mountaineers receive special discounts and benefits, for more information see: mountaineers.org > log in > Membership > Benefits > "redeem your benefits" link

Some stores (this is not an endorsement)

Arc'teryx	http://arcteryx.com	
Second Ascent	http://ascentoutdoors.com	Seattle, Surplus, Rentals
Backcountry	http://backcountry.com	
Bentgate	http://bentgate.com	
Big 5 Sporting Goods	http://big5sportinggoods.com	
Campmor	http://campmor.com	
Eastern Mountain Sports	http://ems.com	
Eddie Bauer / First Ascent	http://eddiebauer.com	
Feathered Friends	http://featheredfriends.com	Seattle, Rentals
Federal Army & Navy Surplus	http://gr8gear.com	Seattle, surplus
Hilleberg the Tentmaker	http://hilleberg.com	Redmond
McHale Custom Backpacks	http://mchalepacks.com	Seattle
MEC	http://mec.ca	
Miyar Adventures	http://miyaradventures.com	Redmond
Moosejaw	http://moosejaw.com	
Mountaineers Marketplace	http://facebook.com/groups/377304859047281	The Mountaineers, Used
Nate's Surplus Army/Navy		Seattle, surplus, 206-767-4950
North Face	http://thenorthface.com	
Outdoor Research	http://outdoorresearch.com	Seattle, Rentals
Patagonia	http://patagonia.com	
Play It Again Sports	http://playitagainsports.com	Used
Pro Mountain Sports	http://promountainports.com	Seattle
REI	http://rei.com	Rentals
REI Used	http://rei.com/used	Used
Sierra Trading Post	http://sierratradingpost.com	
Steep & Cheap	http://steepandcheap.com	Clearance
Summit Hut	http://summithut.com	
Tarptent	http://tarptent.com	
Wilderness	http://wildernessoutdoorstore.com	Bainbridge Island
Zpacks	http://www.zpacks.com	

Some repair shops (this is not an endorsement)

Chick's Shoes	http://chicks-shoes.com	Mercer Island, boots
Dave Page Cobbler	http://davepagecobbler.com	Seattle, boot and shoes
Rainy Pass Repairs	http://rainypass.com	Seattle

REQUIRED GEAR

Backpack

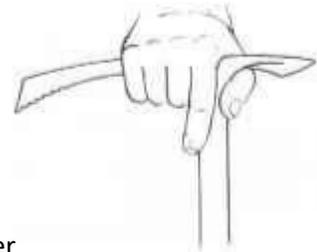
required

- For day trips a good capacity may be around 40L
- If you want to do multiday scrambles then 50L–60L may be good
- Make sure there's a specifically designed method for attaching your ice axe to the outside
- A good pack has lots of external loops for attaching gear to the outside
- If you can't decide which backpack to get, fill them with weight and select the most comfortable one

Ice axe

required

- The ideal axe is a general purpose alpine axe with a straight shaft and an adze
- Specialized ice climbing tools and ultralight trekking axes are **not suitable**
- Most scramblers use an axe length between 60cm and 75cm, which is longer than ice climbers want
- Most retail workers will try to talk you into too short of an axe. Please ignore their length recommendation and follow the steps below – if one of the course instructors tells you your axe is not the proper length then you should exchange it for a new one before the Snow Field Trip. This is not a comfort issue it's a safety issue
- Steps to follow to determine a good length:
 1. Hold the axe as shown
 2. Stand and relax your shoulders
 3. Grip the axe firmly with your arm relaxed and the end of the axe near the floor
 4. To prevent yourself from leaning over and buying too short of an axe, it may help to hold an axe of the same length in each hand at the same time
 5. When leaning over to look at the axe length, don't allow your hand(s) to lower
 6. The bottom of the axe should be only a couple inches off the ground while wearing your mountaineering boots, if you're wearing shoes with a thinner sole then the axe should be about an inch off the ground
 7. If you're between two sizes then select the longer one
 8. If you're really tall then you can buy longer axes online, some are available in 90cm or longer



Mountaineering boots

required

- This is the single most important piece of gear since you'll be wearing them all day
- It's critical to your comfort and safety that you don't try to cut corners by using inadequate footwear
- Look for 3-season mountaineering boots
- Stiff toes are very important, allowing you to kick steps in snow
- Stiff soles with a shank or partial shank are required for edging on rock, hard snow, and to accept crampons
- Look at boots in the \$250 to \$350 range
- Allow a few hours to try on boots in a store, walk around in them for a long time
- For scrambling you want light-duty mountaineering boots or heavy-duty backpacking boots
Light-duty backpacking boots aren't stiff enough and they'll make the Scrambling Course difficult
Heavy-duty mountaineering boots (over \$350) can be too heavy and uncomfortable for scrambling
Trail running shoes are not allowed in this course or on scrambles
- Your toes should never be able to touch the front of your boots
Keep in mind that hiking socks are usually on the thicker side, and some people wear sock liners for blisters
When trying on boots at the store, make sure to wear your thick hiking socks
Try to scuff your feet firmly forward, **ideally on a downward slope**, to make sure your toes never touch
Hardly anyone ever complains that their boots are too big
- Some factory insoles do not provide adequate arch and heel support, so select good replacement insoles and use them when trying on boots as they can drastically alter the fit of the boot
- Waterproof boots are nice but require you to apply a waterproof coating, Gore-Tex boots are very common but are more expensive
- To clean muddy boots just let them dry then use a clean brush, don't use hot water to clean them

Climbing helmet

required

- Must be UIAA or CE approved for climbing
- Unacceptable types are bicycle, kayak, motorcycle, snowboard, and other non-climbing helmets
- Provides some protection in the event of a fall and also protects against rock fall from above
- Climbing helmets also have clips around the side to hold a headlamp
- Make sure it's large enough to fit over a stocking cap

Clothing appropriate for the weather and conditions

required

Waterproof jacket and pants

- This can be important even on blue sky days, it protects from the wind – soft shell jackets are much lighter and also protect from the wind but aren't waterproof
- Waterproof jacket, many types to choose from
- Waterproof pants, many types to choose from but you should get a pair you can put on and take off while wearing your mountaineering boots, usually this means zippers along the outside
- Look for a jacket with a hood large enough to fit over your climbing helmet
- Note that some have a physical water barrier like Gore-Tex, and some are a waterproof coating

Mid layers

- No cotton!
- Your choice of jackets (fleece, down, softshells, windbreakers, etc.)
- Your choice of shorts and pants (some are stretchy for big steps, some have nice pockets, etc.)
- Think in terms of layers since it gives you more combinations to regulate your temperature
- Down is great but it must stay dry from rain and sweat to be effective
- Wool works great for multiday trips since it doesn't retain odor, but it can be bulky – always wash wool in cold water and on delicate to prevent it from turning into hard felt
- Lots of options, figure out what works best for you

Base layer

- No cotton!
- Usually this is a thin layer, and usually form fitting to help wick sweat
- Your choice of short sleeves, long sleeves, long underwear, etc.

Hiking socks

- No cotton!
- Wool works great – always wash wool in cold water and on delicate to prevent it from turning into hard felt

Gloves

- No cotton!
- Think about bringing more than one pair since they usually get wet
- Mittens are warmer than gloves, but you lose dexterity on scrambling terrain
- Some are touch screen compatible, some have pockets for hand warmers, etc.
- Lots of options, figure out what works best for you (material, thickness, waterproofness, etc.)

Stocking cap and balaclava/facemask

- No cotton!
- A thin stocking cap is nice for when you're hiking, thick ones are nice for an unplanned overnight

Protected downclimbing kit

required

- This will be given to you at the Gear Workshop
- It's for emergency use only, and scramble leaders carry a rope for emergency use only
- Contents:
 - 1/2 inch webbing to make an emergency harness – once it's tied don't untie it, to resize just loosen it
 - 5mm cord for connecting to a rope
 - Locking carabiner

Crampons (if required by trip leader)

required

- Useful in the spring and summer on hard snow and ice, and on wind-blown slopes in the winter
- They're required for the Snow Field Trip and also for the Experience Field Trip
- If you're not sure whether you should bring them on a scramble then check with the scramble leader
- You can also rent them from various outdoor stores for the two field trips when they're required, see the list of gear stores
- Be sure to take your boots with you when shopping for crampons to ensure a proper fit
- Crampons with 10+ points, including 2 horizontal front-points, work great
- Lightweight aluminum crampons are ideal for scrambling and also when you're on a glacier – steel crampons are too heavy and primarily used for ice climbing since they have more aggressive teeth
- Full straps for the heel and toe make them more versatile and are cheaper and are what most people buy– if your boots have crampon grooves then instead of straps you can buy ones with metal bars which lock into the grooves
- Most crampons allow you to adjust the length without a screwdriver, this is a great feature if you need to adjust them during a trip when you don't have tools
- Anti-balling plates can be a nice feature in certain types of snow conditions but they aren't required
- New crampons are extremely sharp – some people purposely walk around on rocks to dull their aluminum crampons
- There are several ways to carry crampons on your backpack, and there are several ways to keep the points from cutting your backpack and other gear, talk with your instructors to figure out what works best for you – sandwiching a thick foam rectangle works well, a Tyvek bag work well, a special crampon bag works well but costs money and weighs a bit, etc.

Bathroom kit

required

- Toilet paper
- A couple "blue bags" and/or multiple Ziploc bags – blue bags are provided at the field trips
- Hand sanitizer
- Feminine hygiene products

Food

required

- Plan to snack throughout the day, not just one big lunch on the summit
- Bring food you like to eat, sometimes you won't have an appetite but you'll still need to consume calories
- Bring more than you think you'll need, you should have food left over at the end of a normal scramble
- It will take some trial and error to figure out the quantities and the types of food which work for you (everyone is different), so for your first several scrambles bring more than you normally would
- Food is calories and calories is heat, so keep eating to stay warm

Water

required

- Bring at least two liters
- On hot days in the summer you'll want more than two liters
- Some people like bottles, some people like bladders with drinking tubes
- Start hydrating the night before a scramble and continue drinking water in the morning before hiking
- On really cold days bladder drinking tubes easily freeze, a good tip is when you're done drinking to blow air back into the tube to remove all the water
- On really cold days storing water bottles upside down keeps the opening from freezing

Backpack water barrier

required

- Most backpacks are not waterproof, so you need to come up with a solution to keep the contents dry
- Needed in the rain, but also needed in snow when setting your pack down
- A couple different ideas:
 - Pack covers fit on the outside, heavy rain still gets in, make sure it fits over your ice axe
 - Pack liners line the inside of your backpack--trash compactor bags work well
 - Large Ziploc bags work well to keep specific items dry

Sit pad / insulation pad

required

- Important insulation barrier between you and the ground, especially useful on snow
- Very useful for an unplanned overnight
- Can be used as a splint for injured limbs, you'll practice this in the Wilderness First Aid Course
- Some backpacks have a removable pad which doubles as an insulation pad

Parking pass (if driving)

required

- Most trailheads require a parking pass for each car, daily ones are expensive so annual passes are common
- If you don't have one then you can choose to carpool with someone who does
- Buy them online, and also at stores such as Fred Meyer, REI, Big 5 Sporting Goods, etc.
- NW Forest Pass – for National forests
- Discover Pass – for state parks such as Mailbox Peak and most trailheads west from there along the I-90 corridor including Mount Si and Tiger Mtn

Carpool money (if carpooling)

required

- Carpooling is always optional
- If you choose to carpool then bring cash to pay your driver, be generous
- What you pay isn't just for gas, it's also for the convenience of not having to drive home when you're tired and it's dark, for the wear and tear to the driver's vehicle, for the dirty mess left in the drivers vehicle, for the risk of theft and damage at the trailhead, etc.
- \$0.14 per mile roundtrip may be a good starting point for each passenger – calculate the amount the night before at home so you have appropriate dollars

Gaiters (if in snow)

strongly recommended

- Used to keep snow/rocks/dirt out of your boots
- When buying, make sure they fit properly – need to be large enough to wrap around your mountaineering boots, but also tight enough around the bottom to prevent snow from getting pounded up inside them
- Tall gaiters are great in the snow – if only buying one pair then buy tall ones
- Short gaiters are nice in the summer
- Wear them under crampons to help prevent accidentally snagging your pants as you take high steps

10 ESSENTIALS (REQUIRED GEAR)

Headlamp with batteries

required

- Needed for early morning starts before sunrise
- Bring one even if you plan to return before dark just in case you're not back in time
- Make sure it has good batteries

Extra fresh batteries

required

- For your headlamp
- Instead of bringing extra fresh batteries you can instead carry a 2nd headlamp with batteries – the bottom line is that you should have a total of two sets of batteries

Compass

required

- Here's a brief summary of the required compass features, beware of really cheap models with all/most of the required features – for more details see the PDF mentioned below:
 - Adjustable declination with a tiny adjustment screw – required, no exceptions, screwless ones fall apart
 - Transparent rectangular base plate – required for drawing straight bearings lines, usually 3–4 inches long
 - 0–360 degree markings – required, some compasses repeat 0-90 in each quadrant which is hard to use
 - Meridian lines – required, these are the four or five small parallel lines under the needle
 - Sighting mirror (not required) – reduces errors when sighting a bearing, nice to have but not required
- Ideally you've already taken the Wilderness Navigation Course and own a compass, if not then reference the [PDF published by the Seattle Navigation Committee](#) containing a detailed list of required compass features and also a list of recommended compass models – search for the PDF on The Mountaineers website: mountaineers.org > In the top header search for "Seattle compass requirements"

Topographic map

required

- Keep it protected from the rain, gallon Ziploc bags work great
- Only use maps with 40 foot contour lines (such as USGS 7.5" maps and some special Green Trail maps), regular Green Trail maps are 80 feet so they aren't detailed enough
- Even if you have a GPS unit you should still bring a paper map
- A couple websites to print your own maps (black and white is okay):
 - <http://caltopo.com>
 - <http://mappingsupport.com>
 - <http://store.usgs.gov>

First-aid kit

required

- You'll learn which items to include during the Wilderness First Aid Course
- Small frequently used items can be in a Ziploc bag near the top of your backpack (ibuprofen, blister care, band aids, etc.)
- All of your other infrequent items can be at the bottom of your backpack (gauze, tape, triangle bandages, sam splint, emergency blanket, paper, pencil, etc.)

Sunglasses

required

- Needed in snow to prevent getting snow blindness
- Should block out most or all UV light
- Side shields are nice on sunny days in the snow – homemade removable side shields can be formed from folded over pieces of duct tape with small holes in the middle
- Dark glacier glasses may be too dark to wear below snowline, and normal sunglasses may not block enough light above snowline, so on really sunny days maybe bring two pairs

Sunscreen <ul style="list-style-type: none">Has an expiration dateEspecially useful in snow – sun will reflect up so apply under your chin, inside your nostrils, etc.	required
SPF lip balm <ul style="list-style-type: none">Has an expiration dateEspecially useful in snowWorks great on your forehead since it doesn't run into your eyes like normal sunscreen does	required
Emergency shelter <ul style="list-style-type: none">Protects you from the elements, especially rain and windExamples: Plastic tube tent, bivy sack, small tent, emergency blanket (not a space blanket), etc.<u>Emergency blankets</u> are thick and strong and are recommended – <u>space blankets</u> are thin, shred easily, and deteriorate over time and are not recommended. Tyvek shelters/bags are not sufficient.Should be something you don't plan on using unless there's an emergency	required
Extra emergency clothing <ul style="list-style-type: none">Required if you get wet (snow/rain, falling in water, sweat, etc.) and to survive the long inactive hours of an unplanned overnightClothing appropriate for the weather and conditions:<ul style="list-style-type: none">Extra base layer set (top and bottom)Stocking cap (a thick one)Extra hiking socksExtra glovesExtra jacket (fleece or puffy)etc.	required
Repair kit and tools <ul style="list-style-type: none">Small pocketknife or multi-tool for first aid and emergency useDuct tape, wrap it around something like a trekking pole or a water bottleMiscellaneous items such as:<ul style="list-style-type: none">zip ties, extra shoelace, cords/straps, etc.	required
Lighter <ul style="list-style-type: none">Waterproof matches are okay too, you'll need to keep the strike dry alsoFor starting damp wood fires, the constant flame of a candle is excellent or Firestarter works great too	required
Extra emergency food <ul style="list-style-type: none">Additional food you don't plan to eat until you spend an unplanned overnight in the mountainsThis food should require no cooking, be lightweight, and be high in calories (granola bars, cheese, nuts, etc.)	required
Extra water <ul style="list-style-type: none">Bring extra water if there's no water on the route, if in doubt then check with the trip leaderWater filters work great if there's water on the routeWater purifiers like iodine tablets work okay too	required

SUGGESTED GEAR

Altimeter

- Very useful for navigating and route finding
- Some \$60 altimeter watches work great
- You can also use a smart phone with a [free GPS altimeter app](#) installed, there are many to choose from – there are a couple documents on The Mountaineers website comparing the accuracy of the different apps: mountaineers.org > In the top header search for "altimeter apps"
- Bring backup batteries/charger since battery levels can drop quickly, especially in cold weather

Insect protection

- Repellents with DEET work great but are not healthy to use – products containing picaridin or oil of lemon eucalyptus work well too
- Head nets can be a lifesaver during peak insect season – they pack small and weigh next to nothing

Leash for ice axe

- Some people use a long one, some people a short one, and some people don't use them at all
- You can make one from 1/2 inch webbing, or you can buy a specifically designed leash
- It's a great idea to have one on steep snow or any place where dropping your ice axe would result in it sliding into an inaccessible area
- Talk with a few instructors about why they prefer their method

Car kit for the drive home

- Comfortable shoes and socks
- Water – for drinking after your trip and also for washing your hands and face
- Dry clothes so you're not wet and stinky on the drive home, especially if you're carpooling
- Wet gear bag to put muddy boots and wet clothes into, especially if you're carpooling

Trekking poles

- Nice for balance like for crossing streams
- Some people use two poles, some people use one, others use none, and others prefer an ice axe instead
- Some people only use them on the descent to help their knees
- Poles which collapse into two or three sections have a low profile when attached to your backpack, this is desirable to prevent getting caught on brush and rocks
- Some have component parts which are replaceable when they break

Sock liners

- Can help prevent blisters

Sun hat

- Keeps the sun off your head and possibly your neck
- Instead some people prefer thin jackets with hoods
- Baseball hats work too

2nd headlamp

- Can be nice if yours breaks or if someone else forgets theirs
- Two small headlamps can be better than one big one – when hiking down a trail you can see better if you wear one on your head and carry one in your hand, the contrasting shadows show the rocks and steps better
- Having two small headlamps can be more reliable and flexible than one large headlamp

Bandana / buff

- Should be the only thing you carry made out of cotton

MicroSpikes or equivalent

- They need to be rugged, so inexpensive Yaktrax won't work
- Two common brands are Kahtoola Microspikes and Hillsound Trail Crampon

Snowshoes

- Get very aggressive snowshoes with large crampon teeth and lateral teeth on both sides
- Some types have a heel lift which can be useful when ascending hard snow
- Avoid tube-frame styles since those usually don't have lateral teeth
- Snow in our local mountains isn't usually dry powder, so you don't need long snowshoes based on the manufacturers' weight recommendations – usually you want the shortest ones, plus shorter ones are much safer when descending
- Talk with a few instructors about the type they prefer

Approach shoes

- Especially useful when there's a very long trail before the scramble begins
- Before wearing them get approval from the trip leader
- They should have grippy soles such as Vibram or equivalent

Whistle

- For emergency signaling (three blasts)
- Some backpacks have them built into the chest strap but those are pretty quiet and useless in rugged terrain where sound waves do not carry very far

Water filter

- Needed on some long scrambles, if in doubt then check with the trip leader
- Iodine tablets are great for emergencies but if you plan to need water during your trip then mechanical filters make more sense
- Some filters requiring pumping, some requiring squeezing, and some let gravity do the work (great for camp)
- Maps may show a lake or stream but it may be seasonal or inaccessible

Spike guard for ice axe

- For safety when your ice axe is attached to your backpack
- Prevents scratching the inside of your car, especially nice when carpooling

Camera**GPS unit**

- Not a substitute for a paper map
- Standalone units work well, so do phone apps such as GAIA – using an old/prior phone with GAIA works great
- Bring backup batteries/charger since battery levels can drop quickly, especially in cold weather

Umbrella

- Great when you know you'll be on a trail for a long time in the rain

Hand warmers

- Have an expiration date
- Great for emergencies such as an unplanned overnight
- Great for people who get cold hands easily
- Some gloves have slots to insert them into

Overnight gear for multiday scrambles

- Some gear you can share such as a tent, stove, water filter, etc.
- Camping gear you'll probably want: sleeping bag, sleeping pad, dinner, spoon, etc.
- Camping gear you can share with others in your group: tent, stove, water filter, etc.
- Read the trip's online Leader Notes and also the email from the trip leader for specific overnight gear and logistics

FAQ

Categories of scrambles

Snow scrambles:

- Normally they begin April 1, but for course students they begin right after the Snow Field Trips in April
- Involve significant snow travel and the need for an ice axe
- Don't confuse these with winter scrambles, a snow scramble can be on a sunny 70F degree day in June
- You can't go on snow scrambles until after your Snow Field Trip but you can sign up for them prior to that
- Sign up for snow scrambles on the website as soon as possible since the snowpack is unpredictable

Rock scrambles:

- Normally they begin after the mountain snow melts and end on October 31
- Involve significant off-trail travel over rock (scree, boulders, blocky outcroppings, low angle slabs, etc.)
- More technical rock scrambles require using your hands
- You can't go on rock scrambles until after your Rock Field Trip and Snow Field Trip but you can sign up for them prior to that

Winter scrambles:

- These are for Scrambling Course graduates only
- They occur between November 1 and March 31
- Cold weather is more challenging to deal with
- Daylight hours are significantly shorter
- Avalanche safety is a higher concern
- Backpack weight is significantly higher (snowshoes, crampons, warmer clothes, more emergency overnight clothes, shovel, etc.)

S and T ratings

Strenuous and technical difficulty ratings on the website ranging from 1 (easier) to 5 (challenging) – this does not correspond to any other popular rating or class, this is a separate rating created by The Mountaineers specifically for rating scrambles

(S)trenuous Level:

- An objective rating based solely on trip mileage and elevation gain
- This does not take into account the pace, terrain, temperature, etc.
- Most scrambles list the mileage and elevation gain, so you may be better off referencing those instead
- It's recommended you start with an S3 and work up
- Examples:

An S3 scramble on a 100F degree day may feel like an S5 trip

A really fast paced S3 scramble may feel like an S4 trip

(T)echnical Level:

- A subjective rating based on the combination of the technical move difficulty and also the exposure (airiness)
- This does not take into account the route conditions (wet rocks, snow level, wind, visibility, ice, etc.)
- A fall with low exposure wouldn't be serious, but a fall with high exposure would be disastrous
- A T4 scramble may seem easy to you but another T4 scramble may scare you
- It's recommended you start with a T3 and work up
- Examples:

A T3 rock scramble may be rated T4 if the rock happens to be wet

A T4 rock scramble could have hard technical moves 5 feet off the ground (high difficulty, low exposure)

A T4 rock scramble could be an easy trail along a very narrow ridge (low difficulty, high exposure)

Which scrambles count toward graduation

- You need three scrambles to graduate:
 - At least one snow scramble
 - At least one rock scramble
 - Your 3rd scramble can be rock or snow
- Experience Field Trip summits do not count
- Your scramble leader will decide if there was enough snow to qualify as a snow scramble or enough rock to qualify as a rock scramble – some scrambles may not be a snow scramble or a rock scramble in which case it could still count as your 3rd scramble
- Reaching the final destination is required, if you turn around 200 feet below your destination for any reason then that summit doesn't count – usually the destination is the summit of a peak but there are a few exceptions, such as Camp Muir
- Scrambles must be led through The Mountaineers, private scrambles do not count
- Conditioning Hikes do not count
- Multiple summits in a single trip count as only one summit (other branches of The Mountaineers may count them as multiple summits)
- All three scrambles must be completed in a safe and competent manner

Signing up for Scrambles

- Search for scrambles on The Mountaineers website:
mountaineers.org > Explore > Find Activities > "Scrambling" checkbox > On the trip listing click "Register"
- Each year there are 250–300 scrambles listed on the website
- Only sign up for scrambles within your level of ability
- Only sign up during the signup window, each trip listing displays when the window opens and closes
- Read the trip's online Leader Notes since some scrambles are only for specific participants
- You are able to sign up for scrambles with other Mountaineers branches
- Some trips fill up quickly, so if there's a trip you really want to do then put a reminder in your calendar for the signup time
- If a scramble is full then you can join the waitlist, very often participants will cancel and you'll get on the scramble, see the "FAQ" section of this handbook on waitlists
- Check the website often since scrambles are added daily and often with only a week's notice, see the "FAQ" section of this handbook on new trip email notifications
- Occasionally a scramble will be "Leader Permission Required" meaning you can't sign up until after you have written approval from the scramble leader, click the "Request Leader's Permission" link to send an email

Canceling off Scrambles

- Cancel off a trip as soon as possible, especially if there's a waitlist
- Canceling at the very last minute is inappropriate, only cancel last minute when absolutely necessary
- Never be a no-show, otherwise everyone will be waiting for you at the trailhead – multiple no-shows may jeopardize your future scramble signups
- Cancel off a trip if you're sick or have an injury which could limit you on the scramble, otherwise you may slow down the group too much or cause a group safety issue
- If the signup window is still open then cancel yourself by clicking "Cancel" on the trip listing
- If the signup window has closed then contact the scramble leader

Waitlists

- If a scramble is full then you can join the waitlist, very often participants will cancel and you'll get on the scramble
- If you're on the waitlist then be prepared to go on the scramble because you may get onto the scramble at the very last minute
- If you're on a waitlist but can no longer go on the scramble, or you want to make other plans instead, then please cancel off the waitlist as soon as possible as a courtesy to the participants after you on the waitlist
- Check where you are on the waitlist in the Activities section of your profile
- If the scramble you want to get on is full then look for other scrambles happening on the same day, a peak you've never heard of may turn out to be a wonderful adventure

Carpooling

- The Mountaineers offers tools to help you set up carpools. but it's always optional
- Carpooling is good for the environment, but it's also beneficial for us and kind to other users especially at trailheads with limited parking
- Scrambling Course field trips have large groups so carpooling is even more important, and you'll receive emails before your field trips detailing specific carpooling logistics
- If you're a carpool rider, then make sure to bring money for your driver; see the "Required Gear" section of this handbook on the carpool money

Makeups for workshops and field trips

- You need to attend all workshops and field trips to graduate
- Makeup options are very limited
- If you're unable to attend any dates for a workshop or field trip then let us know as soon as possible by emailing foothills.scrambling@gmail.com

Frame of mind while on scrambles (expedition behavior)

- Scrambling is a team activity, you'll need to work together and rely on each other – be committed to the group's goal
- Be humble and approach situations assuming you may learn something and improve
- Arrive at the trailhead prepared – research the route ahead of time, bring all the necessary equipment, be in good physical condition, be mentally prepared for the day
- You are an active participant since The Mountaineers isn't a guide service – that means always speak up if you have a concern, make safety your number one priority, make sure everyone in your group is accounted for, help someone if you see them struggling, etc.
- You're responsible for your own safety and wellbeing at all times – if you think something is unsafe then please speak up
- If your pace is a lot faster than the rest of the group then resist going far ahead of everyone, instead stay with the team and offer to help slower scramblers by taking some of the weight out of their backpacks, or stay in front and help with route finding
- When you get to the summit you should still have 50% or more of your energy remaining, otherwise you may not have the energy needed to get back safely which could compromise group safety – monitor your own physical and mental state and its impact to the group
- Don't make summiting your goal, that way you won't be tempted to sacrifice safety just to reach the summit
- A successful scramble doesn't mean you reached the summit, successful means everyone made it home safely and had a good time – focus on the success of the group

Experience Field Trip, Saturday or Sunday, May 2 or 3

Logistics

- This is some basic information to help you plan your weekend ahead of time. More specific information will be emailed to you prior to the field trip.
- This event occurs in the Bean Creek basin which is near the Beverly Campground, about 25 miles north of the town of Cle Elem WA, and about 2.5 hours from Seattle
- There's a short stream crossing about 15 minutes from the cars. The water may be up to your knees so bring stream crossing shoes to wear such as sandals with straps (not flip-flops) – you may want a method to attach your boots to your backpack. A small towel may be nice to dry your feet before putting them back into your hiking socks – the water level changes each year so more info will be shared with you as the field trip approaches
- Parking is very limited at the trailhead, so one option is to meet at a campground and carpool from there
- Treat this like a normal field trip and show up at the trailhead in the morning then at the end of the day drive home, or you can camp Friday night and/or Saturday night (see below for overnight camping options)
- If you're driving from Seattle to the field trip in the morning then you'll probably need to wake up around 2:30am to have time to get ready, eat, meet up with your carpoolers if you're carpooling, drive 2.5 hours to the trailhead, and have enough time to get ready
- **Saturday field trip students:**
 - Spend Friday night at a campground if you'd like
 - After your Saturday field trip you can drive home right away
 - Spend Saturday night at the campground if you'd like, then drive home Sunday morning
 - Some leaders will be offering scrambles on Sunday so you may consider staying Sunday night, as well.

Overnight camping options

- The Beverly Campground (recommended) is a five minute drive from the field trip trailhead – The 29 Pines and De Roux Campgrounds are also nearby
- If you prefer a hotel then Cle Elum is fairly close
- At the Beverly Campground, if you're the first person at a campsite then pay the few dollars in cash to reserve it (bring a couple \$5 bills and a few \$1 bills), most campsites have room for multiple tents so please allow other people from this course to join you
- If you need to share a tent then make sure to arrange that well in advance
- There is limited parking at the Beverly Campground but there's a lot more parking about 1/8 mile north

Low-impact recreation reminders

Pack it in, pack it out

- Toilet paper and feminine hygiene products – always pack it out, never bury it
- Solid human waste above tree line – always pack it out, never bury it
- Solid human waste below tree line – either pack it out or bury it in a small hole dug 6–8 inches deep in dirt (not snow) and at least 200 feet from water, campsites, and trails – never bury toilet paper or feminine hygiene products – ice axes work great for digging holes
- Pack out all trash and leftover food (includes fruit and vegetable peels, seeds, etc.)

Leave no trace

- Leave rocks, plants, and other natural objects as you find them – do not add rock cairns or flagging
- In popular areas – use trails and never cut switchbacks, also walk in the middle of trails even when muddy
- In pristine areas – when off-trail spread out to prevent the creation of a new trails

Weather and road conditions

- Mountain weather forecasts:
 - <http://mountain-forecast.com>
 - <http://weather.gov> – tip: on a scramble listing click "full route/place details" then "weather forecast"
 - <http://caltopo.com> – utilize "Point Info" feature for NOAA forecast
- General weather forecasts:
 - <http://accuweather.com>
 - <http://wunderground.com>
- Avalanche forecasts:
 - <http://nwac.us>
- Trail and forest road conditions:
 - <http://wta.org>
 - <http://www.fs.fed.us>
 - <http://peakbagger.com>
- Road conditions and cameras:
 - <http://wsdot.com/traffic/passess>
- Mountain cameras:
 - Mt Rainier has an entire webcam page from all around the park
 - Mount Si live video feed: <http://146.129.248.180/northbend.html>
 - Check ski resorts, etc.

New trip email notifications

- Be among the first to know when a scramble leader lists a new scramble on the website by signing up to receive notifications
- One method is to join The Mountaineers google group and get a daily email containing new activities:
<http://mountaineers-events.appspot.com>
- Another method is to go to My Profile on your Mountaineers page, select My Preferences, and then under Alerts and Notifications Preferences, choose the activities and courses that you want to be notified about. Read more here: <https://www.mountaineers.org/blog/3-2-alerts-notifications-pre-order-books-course-management>

Logging trips on peakbagger.com

- There are many ways to keep track of the scrambles you've done, but one of the neatest methods is to create an account and record your trips on:
peakbagger.com
- The website has all of the summit lists (like the 100 peaks in MRNP, the Snoqualmie 20, etc.) and as you log your summits it will display your progress within all the summit lists
- This is also handy as a type of climbing résumé, allowing you to send a link to your peakbagger profile to trip leaders so they can see if you're a good match for their trips – some people even put a link to their peakbagger profile on their Mountaineers profile

Winter Scrambling Seminar

Optional seminar at the beginning of December in Seattle intended for graduates of the Scrambling Course who are looking for more information about the challenges of going on winter scrambles – topics include:

- How winter scrambles differ from snow scrambles
- The types of additional clothing and gear you'll probably need
- How to deal with the challenges of unpredictable weather
- What to look for when shopping for snowshoes
- Methods to stay warm
- How to manage your water
- Avalanche gear you may need depending on conditions
- Route finding difficulties over snowy terrain
- Emergency gear your group should carry in the winter

CLUB POLICIES

Reporting an issue

- Use this website form to [file a formal confidential complaint](#) about any issues:
mountaineers.org > In the top header search for "Behavioral Complaint Form"

The Mountaineers climbing code

This code provides safeguards and helps prevent misjudgments – mountaineering accidents could have been avoided, or their effects minimized, if these simple principles had been followed:

- Leave the trip itinerary with a responsible person
- Carry the necessary clothing, food, and equipment
- A climbing party of three is the minimum, unless adequate prearranged support is available
- Keep the party together, and obey the leader or majority rule
- Never climb beyond your ability and knowledge
- Never let judgment be overruled by desire when choosing a route or deciding whether to turn back
- Follow the precepts of sound mountaineering as set forth in books of recognized merit
- Behave at all times in a manner that reflects favorably upon mountaineering, including adherence to Leave No Trace principles

Harassment

- See the section above if you need to report an issue
- The Mountaineers is committed to maintaining an environment which is free of verbal, physical and visual forms of harassment so that everyone can enjoy our club activities in a productive, respectful and dynamic environment
- The Mountaineers does not allow harassment of any kind by one member towards another including harassment based on gender, sexual orientation, race, color, national origin, religion, age, disability, or marital or veteran status

Anti-discrimination

- See the section above if you need to report an issue
- The Mountaineers is committed to an anti-discrimination policy in its programs and services
- The Mountaineers does not discriminate based on race, religion (creed), color, ethnicity, national origin (ancestry), religion, sex, sexual orientation, gender expression, age, disability, veteran status, military obligations, immigration status and marital status

Alcohol, marijuana, and other drugs

- Alcohol and other drugs can affect your ability, judgment, and safety – this can also affect group safety
- Alcohol and other drugs are [not allowed before or during](#) scrambling activities
- Alcohol is permitted at certain Mountaineers events, for example the Experience Field Trip cookout on Friday night
- Even though marijuana is legal in Washington State, it's still illegal on federal land which includes most of the mountain areas where you'll be scrambling – bringing marijuana on scrambles is not allowed

Firearms

- Firearms or any other items which will impair the safety or enjoyment of others are not to be brought on The Mountaineers premises or taken on any club activities

Additional policies

- The full list of Mountaineers policies is located here:
mountaineers.org > In the top header search for "board policies"

WHAT'S NEXT

When you've graduated from the Alpine Scrambling Course there are many paths you can follow based on your interests

Go on trips in the summer

- Scrambles (April–October) – continue enjoying these
- Hikes – everyone can sign up for these

Go on trips in the winter

- Winter scrambles (November–March) – these are very different from summer scrambles, there is also a Winter Scrambling Seminar in early December to get you started, see the "FAQ" section of this handbook on the Winter Scrambling Seminar
- Snowshoeing trips – Scrambling Course graduate are qualified to sign up for any snowshoeing trips – these range from Basic trips ending at a frozen lake to Backcountry trips with snowy peak destinations requiring ice axes (they teach ice axe arrest in the Backcountry Snowshoe Course)

Take courses with The Mountaineers to advance your skills

- Advanced Scrambling – modules offered throughout the year (ropes & anchors, emergency overnights, etc.) and taking these will help prepare you to become a scramble leader
- GPS Navigation Course – learn how to use your GPS – smartphone GPS apps work great
- Basic Alpine Climbing Course – an involved course learning how to belay, climb Glaciers, follow on rock
This course can also be taken as three separate smaller courses:
 - Scrambling Course – congratulations, you're already done with this component
 - Glacier Travel Course – see below
 - Introduction to Alpine Rock Course – see below
- Glacier Travel Course – this is a component of the Basic Alpine Climbing Course, you will learn how to safely climb glaciers while roped up and have the opportunity to climb Mt Rainier and Mt Baker amongst others
- Introduction to Alpine Rock Course - this is a component of the Basic Alpine Climbing Course, you will learn how to be a second/follow on rock climbs
- Winter Camping Course – this is through the Foothills Snowshoe Committee, this course will teach you how to build a snow cave and spend the night in it
- Avalanche courses – there's a short course on avalanche awareness and also a much more advanced AIARE Level 1 course

Instruct/Volunteer

- The Mountaineers always pairs up new instructors with experienced instructors
- To sign up just find the course you want to help with and sign up as an instructor
- Scramble Course instructor – next year you can instruct at any of the field trips. This helps cement the skills you learned as a student – having just taken this course it's all fresh in your mind, making you a valuable asset to help new students
- Scrambling Committee – join the committee to help shape the direction of future Scrambling Courses
- Snowshoe Course instructor – instruct at the field trips--also a great way to practice ice axe arrest again
- Wilderness Navigation Course instructor – Help at the workshop or the field trip--doing both renews your Basic Navigation Course badge for an extra three years
- Wilderness First Aid patient – Be one of the accident victims for the scenario part of the Wilderness First Aid Course
- Leadership – The Mountaineers offers great Outdoor Leadership workshop, open to all and strongly recommended for anyone possibly considering becoming a trip leader within The Mountaineers

NOTES & CONTACTS