

American Alpine Institute
Alpine Mountaineering and Technical Leadership

Part 3a – Remote Expedition
Advanced Alpine Mountaineering and Rock Climbing, Aid Climbing, Big Wall Techniques
and Remote Cascade Expedition

Curriculum

Advanced Aid and Free Climbing Skills:

- selection & use of personal equipment for an aid climb including specific ropes, harnesses, & equipment
- design concepts, selection & use of technical equipment for mixed aid & free climbing
- advanced rigging for multi-pitch climbing
- use of big wall gear & equipment including etriers, daisy chains, mechanical ascenders, haul bags, port-a-ledges, leeper cams, hooks & an assortment of other gear
- use of fixed lines
- strategy for multi-pitch aid or mixed climbs
- strategies for multi-pitch descents
- techniques for hauling, big wall bivies, & for pendulums
- clean aid climbing techniques
- complex hauling systems
- management of hanging belays
- strategies for multi-day routes

Expeditionary Skills:

- planning and preparing for a large scale backcountry expedition
- continued training on the use of maps, compasses, GPS, and guidebooks
- strategizing for multi-day “carry over” routes in a remote setting

Ice Climbing and Mountaineering Skills:

- continued study of ice climbing technique including all ice axe positions
- review of glacial and ice structures
- development of advanced technical protective systems in an alpine setting
- advanced study of movement over complex alpine terrain

Objective Hazards Evaluation & Self-Rescue Skills:

- evaluation & prediction of mountain weather patterns
- introduction to the assessment of natural hazards
- individual & team crevasse rescue techniques

Leadership Skills:

- continued study and practice of individual technical leadership skills
- technical & personal functions of individuals on an ascent: roles & responsibility
- problem solving: gathering appropriate data & assessment techniques

- evolving leadership roles: individual leadership vs. collective decision making
- large and small team expeditionary leadership strategy

Itinerary

The following is an example itinerary. This is subject to change due to weather, fitness, technical skill, road closures, wildfires or a variety of other circumstances. All course material will be covered, it simply may not be covered in this order.

It is likely that participants will go out to dinner one to three times throughout the duration of the course.

Day 1:

Meet in Bellingham at 7:00am at the American Alpine Institute office. Drive to Index and begin aid-climbing instruction. Guides will demonstrate lead climbing on aid and gear cleaning techniques. Students will demonstrate an understanding of these principals. Car camp.

Day 2:

Continue the study of aid climbing technique. Develop an understanding of steep aid technique, hooks and leeper cams. Develop an understanding of the use of fixed lines in aid climbing. Introduce the basic principals of using a haul bag. Begin to develop a plan for the expedition portion of the trip. Car camp.

Day 3:

Students will continue to practice aid climbing, applying all of the techniques that they have learned up to this point. Additionally, they will begin to work with the concepts of combined aid and free climbing, pendulums, and port-a-ledge bivies. Continue to discuss the expedition portion of the trip. Sleep on port-a-ledge or car camp.

Day 4:

The final day of aid climbing will culminate in a small ascent of a multi-pitch line. Every principal of both aid and free climbing will come into play in order to complete the ascent. Finish strategizing the expedition portion of the trip. Sleep on port-a-ledge or car camp.

Day 5:

Stop at a grocery store to resupply for the expedition portion of the trip. Pack for the backcountry and then drive to the trailhead. Make an approach to your initial camp.

Day 6-12:

The remaining portion of the trip will be planned during the first four days. During the expeditionary timeframe, climbers will have the opportunity to climb a number of remote peaks deep in the Cascades. Depending on the interest of the participants, these ascents may be more heavily oriented toward rock, ice or glacial mountaineering. All participants will have the opportunity to “take the sharp end” in both technical leadership as well as in group leadership.

NOTE: Occasionally an AMTL 3a will complete some day trips on more accessible alpine peaks if the team gets out of the mountains early.

Part 3a – Remote Expedition Options

Depending on the weather and conditions, the team may elect to do one or two significant backcountry trips. Following are common areas and the climbing options they present:

1) Eldorado / Boston Basin Program

Eldorado Peak and the adjacent peaks require significant effort to reach. When you combine a trip to the Eldorado area with Boston Basin, it becomes clear that this is an exceptional area with dozens of options. The final objectives in these areas will be curated by your instructors based on your personal skill level to ensure that you have the best learning experience possible.

Following are some options. Note that most programs will attempt two to five of these objectives depending on time, team fitness and skill. Also note that there are several options not listed here.

- Eldorado Peak, East Ridge (Glacier, Steep Snow, II)
- Eldorado Peak, North Ridge (Glacier, Steep Snow, 5.8, II)
- Dorado Needle, Northwest Ridge (Glacier, 5.6, II)
- Torment-Forbidden Traverse (Glacier, Steep Snow, 5.6, V)
- Aiguille de I'M, North Ridge (5.0, I)
- Forbidden Peak, West Ridge (Steep Snow, 5.6, III)
- Sharkfin Tower, Southeast Ridge (Glacier, Steep Snow, 5.0, II)
- Sahale Peak, Quien Sabe Glacier (Glacier, Steep Snow, 5.0, II)

2) Twin Sisters Range

The Twin Sisters Range is easily visible from Bellingham. But the east side of the range is buried deep in the Cascade jungle. A half-a-day of bushwacking and a few river crossings bring the hearty to solid rock in a remote area. There are dozens of traverses and lines in this area, not all of which have been completed.

Following are some common objectives:

- The Mythic Wall (5.10-, III)
- Green Creek Arete (5.6, II)
- Green Creek Needle (Glacier, 5.7, I)
- Skookum Peak, Northwest Ridge (Glacier, 5.4, II)
- Skookum Peak, East Face (Glacier, 5.8, III)
- Cinderella, East Buttress (5.6, II+)
- North Twin Sister, West Ridge (5.0, II)
- South Twin Sister, West Ridge (5.4, II)

3) Mt. Shuksan Exploration

Mt. Shuksan is a significant peak that stands alone near Mt. Baker. Some students may have climbed the mountain on an earlier program, but they didn't experience it. In this option, the team will explore several different routes and lines on the mountain from a basecamp, or from a camp that moves around the mountain.

Following are some common objectives:

- Fisher Chimneys (Glacier, Steep Snow, 5.0, II+)
- North Face (Glacier, Steep Snow, Ice, IV)
- Northwest Rib (Glacier, Steep Snow, 5.6-5.8 based on variation, III)
- Hanging Glacier (Glacier, Steep Snow, Ice, 5.6, III)
- Northwest Arete (Glacier, Steep Snow, 5.6, III)
- Northeast Summit Ridge (Glacier, 5.7, III)
- Circumnavigation of Summit Pyramid (Glacier, Steep Snow, III)