



# Alpine Institute

## AMTL 4 Itinerary

### Curriculum

#### Backcountry Mountaineering and Climbing Skills

- Selection & use of personal equipment for advanced backcountry mountaineering
- Route selection and hazard assessment
- *Leave No Trace* travel, climbing, and camping skills
- Design concept and selection of equipment
- Practical application of movement skills on loose alpine rock
- Practical application of movement skills on steep snow and ice

#### Expeditionary Skills

- Planning and preparing for a large-scale backcountry expedition
- Continued training on the use of maps, compasses, GPS, and guidebooks
- Strategizing for a traverse with several climbing objectives en route

#### Mountaineering Skills

- Review of glacial and ice structures
- Continued development of mountain sense and the ability to follow a “line of weakness “
- 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 (the team will practice “the AMGA crevasse rescue drill”)
- Review of technical self-rescue skills on rock

#### Leadership Skills

- Continued study and practice of individual technical leadership skills
- Development of technical leadership strategies on complex terrain
- 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

## Day 1:

Meet in Bellingham at 7am. The team will review tour planning and expedition planning skills. They will develop a tour plan and devise a series of ascents that will be completed during the program. Additionally, they will prep gear and equipment. This process of prepping will take all day. Car Camp.

## Day 2:

The team will buy food and pack for the expedition. They will then drive to the vicinity of the trailhead (2 hours) and camp. If there is time, the team will do a quick review of crevasse rescue in the trees at the campground. Car Camp.

## Day 3-11:

Over a period of eight days, the team will complete both the Ptarmigan Traverse and several climbing objectives. Students will decide which objectives when they make their plans on Day 1. During the traverse, the guides will determine a day to do some ice climbing in a crevasse and practice an advanced crevasse rescue drill ("the AMGA Crevasse Rescue Drill").

The team will have to determine which locations are best for additional days of camping to climb the peaks that they want to climb. It should be noted, that the traverse is more heavily glaciated on the south end near Dome Peak.

## Transfer #1

*Objective: Cascade Pass Trailhead (3,600') to Kool Aid Lake (6,120') 7-9 Hours*

The Cascade Pass trailhead can be found at 3,600' at the end of the Cascade River Road. From there we will hike 3.7 miles on the well-maintained Cascade Pass trail up through 36 switchbacks to Cascade Pass at 5,400'. (Approximately 2 hours)

At Cascade Pass, turn we will turn right 90 degrees, and head south up the Mix-up Arm on a well-worn trail through the heather and talus. We will follow this trail to a rocky spur at 6,100' and then drop onto the Cache glacier. We'll then make our way up to Cache Col passing two side-by-side notches (Gunsight notch) on the right in Mix-up Peak's SW ridge.

At Cache Col, there are campsites, but there is limited water and shelter from the wind. It's better to descend down to Kool Aid Lake.

## Kool Aid Lake Climbing Objectives

- Mix-Up Peak
- Magic Mountain
- Hurry-Up Peak
- Arts Knoll
- Mt. Formidable
- Spider Mountain

## **Transfer #2:**

*Objective: Kool-Aid Lake to Yang Yang Lakes (5,830') 8-11 Hours*

From Kool Aid Lake, we'll head south on either a trail or on intermittent snow fields to the Red Ledges which are the big red scar in the black rock spur below Art's Knoll. We'll traverse to the ledges and climb a small snow finger just left of and below the ledges. The ledges themselves are broad and easy unless covered with snow. We'll continue to follow these right until the exit onto the meadows of Art's Knoll are reached.

From here we'll descend the trail around a spur, under a series of small bluffs. From here it is possible to see two cols at the top of the Middle Cascade Glacier, the proper col is the one to the east/left. We'll cross a series of gravel ribs and small snowfields until cresting on a rounded rock hump just North of the Middle Cascade Glacier.

From there, we'll enter the glacier above the prominent icefall (6,400') and travel up the Middle Cascade Glacier, staying left of center. At the top (7,400'), we'll traverse left to the second col.

It is possible to see Yang Yang Lakes from the Spider/Formidable col (7,320') so we'll inspect the route carefully for tracks and/or debris before heading down, as this is the best view.

From there, we'll descend moderately steep snow (up to 40+ degrees) for 200', and then take a hard right below the rocky point on the right. We'll traverse across snow-covered granite benches passing beneath Mount Formidable. From the lower east side of the snowfield, it is possible to pick up the trail leading to the lakes and good campsites on the Southeastern shore of the lakes.

## **Yang Yang Lakes Climbing Objectives**

- Spider Mountain
- LeConte Peak

## **Transfer #3**

*Objective: Yang Yang Lakes (5,830') to White Rock Lakes (6,200') 7-11 Hours*

The start of the trek for the day is not obvious. As such, we'll scramble southwest from the southernmost lake along worn tracks starting on the west shore, aiming toward the left (south) corner of a horizontal snowfield at perhaps 6,200'. From there a distinct but steep track works its way up through rocks and heather, reaching LeConte Pass at approximately 6,200'. We'll Contour southwest along heather, scree, and snowfield until arriving underneath the east flank of LeConte Mountain.

If time and conditions permit, we will make a quick ascent of LeConte Mountain's Northwest Ridge, a 3rd and 4th class scramble with some steep snow.

From the base of the mountain, we will drop down and skirt below a black buttress between the route and the LeConte Glacier. Once on the glacier climb we'll climb fairly easy snowslopes, staying right of center, weaving through a few medium-sized crevasses to the Sentinel-LeConte saddle (7,800').

Beyond the saddle, we'll gently descend the west flank of Sentinel, maintaining a high but gently descending contour across the snow-covered bench and several talus ribs until reaching a gentle snow slope that leads south down to the head of the South Cascade Glacier (6,800') and walk across the very gentle glacier to Lizard Pass (6,600').

At Lizard Pass there are two choices. We'll either descend to a rock spur just left of the snow slope and find a steep, exposed trail following it down to the lakes. Or we'll head down the moderately steep snow slope (35 degrees) until it ends. We'll then traverse from the bottom left corner of the slope and find the rock spur trail. We'll continue to follow this down through the steep slabs below. Campsites are located on the south shore of the lake.

### **White Rock Lakes Climbing Objectives**

- Sentinel Peak
- Old Guard Peak

### **Transfer #4**

*Objective: White Rock Lakes (6,200') to Itswoot Ridge (6,400')/Cub Lake (5,340') or Dome Peak Basecamp 8-12 Hours*

From White Rock Lakes, we'll follow a trail heading right/southwest from White Rock Lake, which stays on top of the bench. As the trail wraps around to the head of the West Fork of Agnes Creek valley, it descends through the cliff bands to approximately 5,800'. We'll cross several snowfields and talus ribs until a low-angle snow and scree gully is discovered which leads back up to the Dana Glacier's far-right snowfields.

Once on the Dana Glacier, we'll ascend southeast to the most difficult col to find in the entire trip. We'll poke around on the ridge until we find the col at approximately 7,600' which requires about 30' of third-class scrambling which leads to the far western edge of the Dome Glacier and Cub Lake.

From the col, we'll descend a trail to the snow fields below and traverse west across three gullies. The right side of gully number three is Itswoot Ridge. It is possible to glissade down the gully until it flattens out. Then we'll follow it down favoring the west side of the ridge with Spire Creek to the right/west.

At 6,400' there are a number of campsites that would make excellent staging areas for an attempt on Dome Peak. Or it is possible to continue for another hour on the trail to Cub Lake.

### **6,400-Foot Camp Ascent Options (Other Closer Camps Available)**

- Dome Peak
- Sinister Peak
- Gunsight Peak

## **Transfer #5**

*Objective: Itswoot Ridge/Cub Lake to Downy Creek Trailhead (1,450') 7-12 Hours*

From the ridge camp, we'll follow the trail south toward Itswoot Lake. We'll take the trail around the north shore of the lake then up over the saddle at 6,000' between the lake and Bachelor Creek (2-3 hours). Trail work was recently done, making the last 14+ miles relatively pleasant compared to years past. We'll follow the trail down paralleling the south side of Bachelor Creek. We'll cross Bachelor Creek at 3,750' via a log/rock hop and continue down the trail until we reach Downey Creek and the Six Mile camp at 2,420' in 3-5 hours.

There are three ways to cross Bachelor Creek. We'll either cross a high log (10' above the creek); wade across in mid-thigh water.; or walk across a small log dam 40' above Downey Creek.

Once we are across the creek it is easy walking on 6.6 miles of maintained trail. (3 - 5 hours).

## **Day 12:**

On the final day of the program, we will review all rock rescue techniques. This may also be done as a weather day activity.

**Note #1:** This route is often done from South to North.

**Note #2:** If the team finishes the traverse more quickly than anticipated, the guides will help them select additional objectives.