

MOUNTAINEERING & HIKE OUT



Alaska Mountaineering School's (AMS) mission is to be the best source for wilderness and mountaineering expeditions in Alaska. On all of our programs we provide superior leadership, convey knowledge clearly and effectively, and instill lifelong appreciation for the wilderness environment. As a school, we provide excellence by offering hands-on education from our classroom--the remote wilderness of Denali National Park and Preserve. Our objective is to graduate safe and responsible mountaineers who understand all the mechanisms that result in a successful climbing expedition. We divide our core curriculum for mountaineering courses into four skill categories: Leadership, Wilderness Skills, Risk Management, and Stewardship and Sustainability. AMS's class progression and direct, personal approach bestow the confidence and competence for you to successfully pursue mountaineering for years to come.

THIS COURSE

The 15-day Mountaineering and Hike Out course is an excellent opportunity to build a solid foundation of essential skills, while pursuing mountaineering responsibly within a challenging and remote glaciated environment (as well as the sub-arctic landscape). This course includes and teaches: glacier travel and crevasse rescue skills, snow and ice climbing techniques, avalanche curriculum, winter camping, route finding, bear safety techniques, river crossings, and environmental studies. Fifteen days provides enough time to apply these skills in a real wilderness environment. Throughout the course participants learn by doing. The experience provides students with the confidence to live comfortably on a glacier, travel roped, climb moderate peaks, and put their skills to the test with the rigorous technical hike out of this terrain back to the road system. This is an intermediate climbing course with the prerequisites that participants arrive in excellent physical condition, have positive attitudes and a desire to learn, have open minds, and to be willing to work hard as team members. Our goal is to provide a solid foundation to pursue mountaineering, and to provide students the knowledge of how to put it all together during the technical traverse during the backcountry travel section.

SPECIFICATIONS

Experience level: Intermediate

Deposit: \$500, due upon registration

Course balance due: 60 days prior to the starting date

Group limit: 6 students, 3 instructors

Tuition includes: professional instructors; one-way glacier flight and gear retrieval glacier flight; van pickup; all course food and team lunch on day one; group camping and climbing equipment: ropes, tents, technical climbing gear, glacier travel rig, custom AMS sleds and duffels, avalanche transceivers, AMS snow saws, and wands; snow kitchen equipment: kitchen tents, MSR cooking stoves, utensils, and fuel; mountain communications: FRS radios, satellite phone (emergency use), Delorme inReach messaging, maps, GPS; remote medical protocols, first aid, medication, repair kits; fully equipped staging area and facilities at AMS HQ and AMS Mountain Shop in Talkeetna; course-long social media updates; luggage storage and free parking; camping at AMS campground (tents are not provided); 10 % discount at the AMS Mountain Shop; welcome-back table with fresh foods and drinks after your course; knowledgeable staff to assist with equipment questions, lodging, and shuttle logistics.

You are responsible for: transportation to and from Talkeetna, Alaska; hotel lodging; Denali National Park Service (NPS) entrance fee (or show your Annual Pass); trip health and travel insurance; personal clothing and equipment; and AMS equipment rentals.

FEATURES

- 1:3 instructor/student ratio, up to 6 participants
- Mountaineering skills progression: protection, anchors, belaying, self-arrest, climbing techniques
- Crevasse rescue, roped glacier travel with 2-, 3-, 4-person teams, and moving camp
- Avalanche curriculum: mechanics, hazard evaluation, and transceiver searches
- Multiple peak ascent opportunities, rock climbing
- Glacier camping and winter survival skills, including building snow walls and snow shelters
- Multi-sport route finding from glacier to sub-arctic tundra and river valley: multiple rappels, climbing through mountain ecosystems
- Traveling and camping safely in bear country
- River crossing techniques
- Leadership, expedition planning, and group dynamics

LEADERSHIP

AMS models and teaches leadership that is situational. You will learn different leadership styles that depend on specific situations, and see how important Expedition Behavior is to overall success. We teach a solution-oriented approach to conflict resolution, along with effective communication methods. You will develop a tolerance for adversity and uncertainty, as well as a clear understanding of both your strengths and potential areas for growth. These are critical for successful climbing. AMS teaches you how to be a leader as well as an active follower, and in doing so you will confidently balance the group's and your own personal goals.

WILDERNESS SKILLS

AMS courses are self-reliant expeditions that fly into the remote mountains of the central Alaska Range. Climbing here requires a solid foundation in winter camping. You will learn expedition-style climbing techniques for scaling remote, high-altitude peaks. You will learn how to probe

out a safe camp on a snow-covered glacier, build a snow quarry, and cut perfect blocks for tent walls or igloos. You and your team mates will build a snow kitchen and learn how to run camping stoves safely and efficiently while cooking nutritious meals. (You will be surprised at how much confidence being comfortable, warm, and well-fed brings!) You will learn how to navigate in a whiteout with a map, compass, and GPS. AMS instructors are known for their Alaska expertise, where wilderness dominates and being self-sufficient is a virtue. Your instructor's transference of essential skills through engaging and entertaining presentations will empower you.

RISK MANAGEMENT

AMS teaches you to consider and be aware of risks in everything you do, from lighting a stove to putting on your backpack. By applying leadership, wilderness, and technical skills to real climbing objectives you will learn to identify and assess mountain hazards. AMS facilitates experiences that develop good judgement. On AMS mountaineering courses, you will learn to assess and communicate decisions and actions, create and implement contingency plans, and make informed and thoughtful decisions.

STEWARDSHIP AND SUSTAINABILITY

AMS strives to ensure that our wilderness values and environmental ethics are reflected in every aspect of our work. You will learn to apply Leave No Trace principles to all components of glacier camping, travel, and climbing. We will help you develop your understanding of land-management and environmental issues facing Denali National Park and Preserve. Through exploring the natural world and discussing its compelling geology, glaciology, ecology, and weather, you will come away with a depth of experience and understanding.

THE FIRST DAY

On the starting day of the course, students and instructors meet at 8:00 a.m. at AMS. Your instructors will perform a thorough equipment check with you at this time, but not before. Anything you need will be issued to you; there is no need to reserve any rentals in advance. Any clothing and equipment you do not need can be safely stored at

AMS, including your vehicle. After the equipment check, we move into AMS's food room and pack lunches. At AMS everyone packs their own lunches with food they choose to eat from a vast assortment of available options. In the mountains where we are burning calories all day it is better to eat a little every hour throughout the day. The AMS food room resembles an organic grocery store and makes figuring out your lunches quick and efficient. When everything is checked and weighed, you eat a freshly prepared lunch at AMS. It is traditional to bulk up before an Alaskan expedition, so we prepare a lasagna and a healthy salad with non-dairy and vegetarian options. Then you get dressed, put your climbing boots on, and have your first class on ascending a rope to get out of a crevasse. You will use 16-foot ropes that hang from our vaulted classroom ceiling. Everyone simulates dangling in a crevasse, dropping their pack, and ascending to safety at AMS in Talkeetna before doing it again on the glacier. After paying your park entrance fee at the NPS Walter Harper Ranger Station in Talkeetna, we drive you 3 minutes to the airport and fly onto the glacier. The 45-minute flight is spectacular and memorable. After arriving on the glacier, the rest of the day is spent building camp, making dinner, and enjoying your first night surrounded by mountains.

UNFLYABLE WEATHER

Alaska's weather is unpredictable and stormy, and occasionally prevents flying into or out of the mountains on schedule. In the event that courses are unable to fly on time, your instructors continue with their class progression at AMS's indoor climbing gym. We will do our best to ensure that your course ends on schedule and most do. Still, we recommend allowing 2 days on the return end of your travel plans (and/or purchasing flexible airline tickets) in the event of delays. *Please refer to the Travel and Logistics sheet for more information.*

INSTRUCTORS

AMS instructors love the Alaskan mountains and have a gift for climbing, teaching, and guiding. Our instructors are talented climbers with extensive backcountry experience. Lead instructors have a wealth of experience climbing in the Alaska Range, as well as teaching mountaineering progressions. All of our staff is familiar with altitude-related problems and extreme weather, and

they know how to set the pace for a successful course. Every one of them has mountain rescue, avalanche safety, Leave No Trace minimum impact certification, and Wilderness First Responder medical training. Their knowledge of the natural and climbing history of the area and their personal stories of climbing in Alaska add immensely to every program. Our guides and instructors represent a close group of educators and mountain guides with varied professional affiliations. *A note on certification:* Other than our own Mountain Guides Course, there is no available certification in the United States or Europe that takes into account the expedition skills necessary to guide in the varied terrain and scope of the Alaska Range. AMS has developed a comprehensive training program for our field staff that includes a time-tested apprenticeship program, technical training, and evaluation system, which results in mountain guides with a depth of Alaska Range knowledge found only at AMS.

FOOD

Food is vital to the success of an any expedition. Learning what foods to bring and how to prepare them are essential skills taught on AMS mountaineering courses. AMS's bulk rations facility allows us to maintain a high standard of food intake during our courses. AMS receives twice weekly deliveries of fresh food from Anchorage suppliers and deliveries of dried food from an organic distributor in Oregon. Commercial freezers and refrigerators, bulk food bins, and custom-built rations tables with food scales line the walls. Large chest freezers have been converted into refrigerators to safely store field rations once they have been packed. No other company comes close to AMS's attention to detail and thoroughness when it comes to course and expedition food. No matter what your dietary requirements or preferences, AMS's food operation will meet your needs.

REFERENCES

AMS is a small, professionally run operation committed to high standards at all levels. Our history offering mountaineering courses and expeditions in Denali National Park and Preserve reaches back to 1983, and everything we do today is built from decades of hands-on experience. We urge you to do your due diligence and research Alaska Mountaineering School and its directors, Caitlin Palmer

and Colby Coombs. Word of mouth is our greatest advertisement.

COURSE GOALS AND OBJECTIVES

It is our goal for each student to accomplish objectives in the following areas:

Leadership

- Display an understanding of instructors' decision-making processes through discussion and questioning
- Communicate effectively using words that remain respectful and inclusive of team members
- Demonstrate competence, make sound decisions, and display a tolerance for adversity and uncertainty

Wilderness Skills

- Master basic knots and rope-handling techniques
- Understand and demonstrate belay techniques appropriate to the situation: glacier travel, running protection, and fixed lines
- Establish a skill base to be a strong expedition member on mountaineering expeditions, such as Denali

Risk Management

- Identify and assess hazards in a glaciated mountain environment and understand risks
- Demonstrate protection placement and building anchors
- Set up 3- and 4-person rope teams with sleds for glacier travel
- Demonstrate ability to ascend a rope out of a crevasse
- Understand mechanical advantage and be able to build a Z-pulley crevasse rescue system
- Demonstrate efficient and safe glacier travel, route-finding techniques, and navigation skills
- Demonstrate snow and ice climbing techniques for moderate and steep terrain
- Demonstrate rock climbing and crampon techniques, as well as running belays
- Demonstrate technical traverse skills and overland trail-less wilderness travel skills
- Recognize and avoid avalanche terrain
- Display knowledge of personal limitations and the judgment to stay within them

Stewardship and Sustainability

- Perform Leave No Trace minimum-impact living and traveling skills appropriate to a glaciated environment
- Familiarization with the natural history of Denali National Park and Preserve
- Understand the conservation issues facing Denali National Park and Preserve

15-DAY ITINERARY

Day 1

8:00 a.m.: Meet at AMS for course orientation. Check equipment and issue gear. Pack lunches. Calculate weights. This is a busy day, so please be on time.

12:00 p.m.: Lunch provided at AMS.

1:00 p.m.: Learn intro to fixed line ascension at AMS's crevasse rescue facility. Classes: knots, use of waist and chest harness and helmet, ascending techniques, releasing the backpack.

4:00 p.m.: Load van. 3-minute drive to ranger station and airport. Organize loads for fixed-wing flight.

4:30 p.m.: Fly onto the glacier. Reorganize loads for glacier travel. After a ski/snowshoe use orientation, rope up and travel a short distance and establish camp. Probe and wand the perimeter, build walls, make sleeping platforms, set up group kitchen, establish bathroom.

6:00 p.m. Make dinner; students learn camp cooking. Classes: site selection, tent spacing, shovel and snow saw use, wall building, tent pitching, hygiene and sanitation, group kitchen basics, stove use and care, cooking basics, bomb-proofing the camp, staying warm at night.

Evening discussion: course goals and expectations, plus Denali National Park and Preserve history and regulations.

Day 2

7:00 a.m.: Group breakfast. Class: food ID and nutrition.

9:00 a.m.–12:00 p.m.: Basic climbing skills: more knots, rope identification and care, rope handling and coiling, snow protection and anchor systems, belaying.

1:00 p.m.–6 p.m.: Roping up for glacier travel, rope travel techniques, simple crevasse fall scenarios, transferring a load, snow climbing techniques, use of ice axe, self-arrest. Head out of camp for glacier travel.

Evening discussion: expedition behavior, intro to leadership.

Day 3

9:00 a.m.–5:00 p.m.: Meet with daypacks ready for full day away from camp. Students organize themselves into rope teams. Ski touring techniques are shown. Group heads to crevasse for self-rescue practice: The site is secured and anchors built for lowering and raising systems.

Evening discussion: Altitude-related illnesses, cold injuries and their prevention.

Day 4

Camp is broken down and moved to a new location chosen based on proximity to peak ascents. Students lead the rope team and campsite selection processes. Once a perimeter is established, all except daypack gear is consolidated and rope teams leave for crevasse route-finding tour. After return to camp, instructors will stage a crevasse fall and rescue. Newest camp is built with individual mega-mid kitchens.

Evening discussion: Avalanche I.

Day 5

Downhill ski progression and ski mountaineering techniques. Students lead rope teams in glacier travel along a safe 30-degree snow slope. Snow climbing and crampon practice is followed by ice axe self-arrest practice. Site turns into a ground school for running protection and fixed lines. Student-led rope teams head back to camp, followed by avalanche transceiver searches.

Evening discussion: Planning a peak ascent, turnaround times for descent, Avalanche II.

Day 6

All-day peak ascent includes route finding, running protection, and performing snow stability test pits.

Day 7

Camp broken down and moved to new location chosen based on proximity to rock climbing and ice climbing. Student-led rope teams and campsite selection. Build snow shelter: digloo.

Evening discussion: Navigation, map reading, compass use.

Day 8

Rock climbing and ice climbing day. *Classes:* setting up a top rope, placing ice and rock protection, and movement techniques for vertical ice and rock climbing. Evening skiing opportunities may be available.

Evening discussion: Difficulty ratings, Alaska climbing history.

Day 9

Rock and ice lead climbing. Students practice leading while on top rope. Instructors follow and evaluate protection. Multi-pitch climbing demonstration.

Evening discussion: geology and glaciology of Denali National Park and Preserve.

Day 10

Rappel day. Practice different rappelling techniques for a variety of terrain and situations. Rappel with a heavy pack. Rappel with an injured climber. Additional skiing opportunities may be available.

Evening discussion: Improvised rescue and litters.

Day 11

Peak ascent, advanced difficulty: multi-pitch climbing, fixed lines, rappelling.

Day 12

Alpine start to packing up camp. Student-led rope teams to pass. Instructors manage and lead multi-pitch rappel and build snow and ice anchors to Granite Glacier, camp on Granite Glacier.

Evening discussion: Leave No Trace ethics, movement strategies and hazard awareness.

Day 13

Descend Granite Glacier on central moraine, climb and hike to blueberry bushes and Wildhorse Basin.

Evening discussion: Bear camping, digging cat-holes, insect management.

Day 14

Climb Wildhorse Pass to Dutch Hills Pass, views are amazing.

Evening discussion: flora, fauna, wildlife tracking, wilderness ethics, history of Denali National Park and Preserve.

Day 15

Alpine start. Terrain includes tundra, brush and river crossings. Meet up with multi-use trails. Dutch Hills Pass to Peters Hill's road pickup point. Meet AMS van mid-afternoon. Drive 1.5 hrs to AMS HQ. Clean up, de-issue, shower. Group dinner at local restaurant.