# 7-DAY SKI-BASED MOUNTAINEERING COURSE

Alaska Mountaineering School promotes excellence in responsible mountaineering and wilderness travel through educating and guiding others. AMS programs follow a progression that prioritizes safety, teamwork, skill-building, respecting wilderness, and having fun. Our hands-on, you do it approach leads to successful outcomes. We want you to be able to repeat the skills you learned without supervision.



# **COURSE DESCRIPTION**

The AMS Ski Mountaineering Course offers skiers an introduction to unsupported winter backcountry travel in a glaciated mountain environment. Roped glacier travel, building camps, crevasse rescue, and a field-oriented avalanche curriculum are built around a ski-focused course. Students learn how to live comfortably and take care of themselves and others in a remote mountain environment. You will be on a snow-covered glacier the entire time learning how to safely explore and enjoy the surrounding mountains on skis. AMS approaches skiing the same way it does climbing; establish a solid foundation in camping and glacier travel from which to pursue the sport.

#### SPECIFICATIONS

Experience level: This course requires excellent skiing ability in order to ski comfortably with a pack or in challenging conditions. You should be able to ski black diamond runs at a downhill ski resort. Previous backcountry skiing and winter camping experience are not required. Participants should be in good physical condition.

Deposit: \$500, due upon registration

Course balance due: 60 days prior to the starting date

Group limit: 6 students, 2 instructors

<u>Tuition includes</u>: Professional ski mountaineering instructors, roundtrip glacier flight, all group camping equipment such as tents and stoves and shovels; all group climbing equipment such as ropes and anchors; all emergency first aid, communication, and repair equipment.

<u>You are responsible for</u>: Transportation to and from Talkeetna, lodging before and after the course, entrance fees to Denali National Park, all food during your course, travelers cancellation insurance, personal equipment and clothing, and AMS equipment rentals.

## FEATURES

- 1:3 instructor/student ratio, up to 6 students
- Mountaineering: glacier travel, crevasse rescue, rappelling with skis.
- Skiing/Split-Board: uphill and downhill techniques
- Avalanch skills: forecasting, route finding, snow test pits, rescue
- Expedition food and kitchen set up

#### **EXPEDITION STYLE & REMOTENESS**

AMS' ski mountaineering courses are self-reliant expeditions that travel in a remote mountain range in Alaska. Throughout the course, students learn to live in a glaciated environment, prepare their own meals, care for themselves, move camp, and backcountry ski. The course format emphasizes hands-on learning and the application of skills in a variety of terrains. It also teaches self-reliance. If the weather is unflyable, evacuation to modern medical facilities can be difficult and may take up to several days. AMS courses model climbing and camping techniques that prepare students to pursue ski mountaineering in a glaciated mountain environment. As is common on mountaineering expeditions, students should expect to have mixed-gender sleeping tents for at least some of their course.

## **ENVIRONMENT & COURSE LOCATION**

Mountaineering courses fly into Denali National Park and Preserve, home to America's greatest mountain range, the Alaska Range. AMS chooses a location to best meet the objectives of the course: pristine wilderness, a variety of ski terrain with multiple aspects, and relatively crevasse-free areas. The exact location depends on conditions, but our favorite areas include the Eldridge, Ramparts, Little Switzerland, and Glacier One. Each of the areas chosen—with their variety of terrain, beauty, and isolation—are challenging and demand respect. Expect to be on snow for the duration of the course and be prepared to encounter all types of weather and conditions. Alaska is full of surprises!

#### WILDERNESS APPRECIATION

AMS is based in Talkeetna in order to access the incredible wilderness of the Alaska Range. Anyone who spends days in these mountains will naturally achieve a wilderness experience. By role modeling the best practices for conserving these areas, AMS hopes to develop the wilderness conservationist in all of us. Thinking ahead and preparing, staying organized, bomb proofing our camps, and paying special attention to hygiene. These Leave No Trace techniques make us a stronger expedition and more likely to achieve our skiing goals.

## **COURSE PROGRESSION**

The Ski Mountaineering course follows many of the same guidelines for any AMS expedition into the Alaska Range. In order to pursue ski or split-board mountaineering unsupervised, we cover every aspect of what goes into un-supported expeditions. After a gear check and final pack, you fly into the Alaska Range for the duration of the course. Students develop skills through repeated practice. The first couple of days are spent learning safe route-finding around crevasses on a glacier and effective rescue techniques in the event of a crevasse fall. Uphill and downhill ski techniques are reviewed, and ski tours are conducted with an emphasis on skiing in control. From our first night and every morning and evening, we will discuss weather and learn to document using abbreviated symbols. Determining snow-pack stability through analysis and observations is a main theme of the course. We eat in a group kitchen and learn the fine art of melting snow, backcountry cuisine, and efficient stove techniques that our Denali guides are known for.

By the fourth day, the course moves camp to a new area with new terrain. Packing up and rigging sleds, route-finding techniques, and building a camp from scratch are all vital skills that are only really learned by doing. The next camp is built with each tent having its own cooking shelter and food rations. Each tent group cooks for themselves. This autonomy is part of transferring responsibility and leadership to each group. By the middle of the course, instructors can set a time for the following morning and students will be ready with their daypacks packed and camp secured. Transference of skills leads to the transference of responsibility. By the end of the course, students lead rope teams and make route-finding decisions with instructors observing.

#### THE FIRST DAY

On the starting day of the course, students meet with instructors at 8:00 am at AMS. There will be muffins, coffee, tea, and juice. After an orientation, we divide into two groups for equipment check and lunch packing. Your instructor will go through all your equipment with you and ensure you are properly outfitted. Any items needed can be rented or purchased at this time. There is no need to reserve in advance. Please read the Equipment List for more information. You will also be packing your lunches in the AMS food room. Each person packs their own lunches individually using food we provide. Please read the Lunch Packing sheet for more information. By mid-day, we serve a hearty lunch at AMS. After lunch, we dress in our field clothing, put on harnesses and helmets, and do our first class: fixed line ascension. After class, we take care of last-minute items, store any gear we are not using, and head over to the Talkeetna airport. Our transportation to the glacier is on ski-equipped, fixed-wing airplanes like the DeHaviland Single-engine Turbine Otter. The 45-minute flight into the mountains is a spectacular highlight of the course. After arriving on the glacier, we take a few moments to enjoy the amazing setting before traveling a short distance and building our first camp. Once camp is built we'll enjoy our first dinner and go to bed warm and dry. The exact location prioritizes the best snow conditions. Areas we have run this course include: The Ramparts, Glacier One, The Buckskin. All these areas have ski runs where the crevasse hazard is low.

#### UNFLYABLE WEATHER

Alaska's mountain weather is unpredictable and difficult to forecast. It can prevent flying into or out of the mountains on time. If your course is unable to fly, we are able to stay busy teaching classes at AMS and you will be given the option to camp here. Although rare, persistent stormy weather at the beginning of a course could result in a location change to the Talkeetna or Chugach Mountains. During a course expect to see a wide range of weather. It is not unusual to have snow and rain during the same course. Courses can also be weathered in the mountains and unable to fly out. We avoid running low on rations by flying in with a week of extra food and fuel. 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 also refer to the Travel and Logistics sheet.

#### LEADERSHIP & TEAMWORK

Successful expeditions are properly equipped and have the necessary technical skills, but most importantly they practice good leadership and learn to work together to achieve group goals. At AMS, developing leadership and teamwork starts with gaining experience and developing good judgment. We teach leadership which emphasizes the importance of taking care of our basic needs like hydration and nutrition and staying warm in order to make us stronger and more durable team members. How to make teamwork work is essential on any multi-day expedition and an important discussion built on throughout your course.

# INSTRUCTORS

AMS instructors all started as skiers and climbers who fell in love with teaching. Like good teachers, they are compassionate about their responsibility for laying a strong foundation for their students. They are attracted to AMS because as a school, we prioritize education. Our format and curriculum is best taught by educators who are well-rounded in many aspects of the outdoors. AMS instructors know how to cook real food, but more importantly, they know how to teach you the fine art of winter camp craft. They enjoy working for AMS because they can teach navigation and glaciology as well as ski some beautiful powder runs in a wilderness setting and no helicopters.

# FOOD

What to eat and how to cook it is vital to the success of any multi-day backcountry expedition. Just as important as tying your knots, having a good kitchen set up with the right food will make or break an expedition. AMS is eager to share with you our favorite recipes, rations, and ultimate kitchen by providing all of it for your course. You will learn how to prepare tasty, nutritious, and hearty meals. We know that looking forward to breakfast is a good way to start each day. Just as looking forward to dinner helps us push to the finish line. AMS' ration plan can accommodate vegetarians and other dietary needs, but please inform us beforehand.

## REFERENCES

Alaska Mountaineering School is a small, family-run operation that cares about its community and the places we visit. Please research us and tell us what you find. Ask other companies who they would recommend if you couldn't go with them. It's nice to hear that many recommend AMS.

#### **COURSE OBJECTIVES**

Each course is unique due to variables such as course area, participants, and environmental conditions. Working with these variables, it is our goal for each student to accomplish these objectives in the following areas.

#### Safety and Judgment

AMS teaches mountaineering skills that promote the health and safety of all course members. Each graduate is expected to:

- Manage the hazards of skiing and camping in a glaciated mountain environment.
- Recognize the causes of ski accidents and how to prepare for them.
- Learn one's own personal limitations and the judgment to stay within them.

#### Leadership and Teamwork

You will be exposed to techniques of outdoor leadership, teamwork, and expedition behavior. Each graduate is expected to:

- Display understanding of instructors' decision-making processes through discussion and questioning.
- Demonstrate good expedition behavior with a positive attitude and desire to achieve group goals.
- Effectively communicate ideas and concerns with individuals and the group.
- Use good judgment and attention to details to participate fully in a safe, environmentally sound expedition.

## **Environmental Ethics**

An important part of every AMS course is the incorporation of Leave No Trace techniques into everything we do. Each graduate is expected to:

- Understand minimum-impact living and traveling skills appropriate to a glaciated environment.
- Appreciate the concern for preserving wilderness quality so that others may share a similar experience.
- Incorporate Leave No Trace techniques throughout the course.

## Winter Camping

AMS courses teach backcountry skills that are safe for the individual and environment. Each graduate is expected to:

- Select a campsite, build a fortified perimeter camp, and stay within the confines of wand-marked areas.
- Live comfortably and learn efficient camping, cooking, and dressing techniques for a variety of conditions.
- Be organized and take care of personal and group equipment.
- Build a snow kitchen and prepare nutritious meals.

## Ski Mountaineering Skills

Many of the safety systems used in mountaineering apply to ski mountaineering. Each graduate is expected to:

- Master basic knots and rope-handling techniques.
- Place snow protection and build anchors.
- Understand a belay techniques using a rope and harness
- Set up rope teams with sleds for glacier travel.
- Set up a Z-pulley system and ascend a fixed line.
- Rappel with skis and a pack.

#### **Skiing Skills**

Each graduate is expected to:

- Learn how to set an uphill track using climbing skins and heel risers.
- Scout downhill skiing objectives and determine boundaries and group-up locations.

- Ski under control as part of a roped team.
- Rope up for approach and egress from chosen ski runs.

#### **Avalanche Awareness**

A key component to being a safe backcountry skier is identifying avalanche problems. Each graduate is expected to:

- Gather information: weather, avalanche activity, snow pit tests, surface clues.
- Know what avalanche problems they face and make a trip plan.
- Route Finding and managing descents
- Rescue drills using avalanche transceivers.

## **DAY-TO-DAY ITINERARY**

AMS' 7-day Ski Mountaineering course itinerary is designed to get the most out of an introduction to Alaska ski mountaineering.

## **Pre-Course Briefing and Packing**

AMS instructors are preparing for two days before the start date to brief, check all group gear, and pack rations.

# Day 1

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

12:00 pm: Lunch provided at AMS.

1:00 pm: Dress for landing on the glacier.

1:30 pm: Fixed line ascension.

3:30 pm: Weigh gear, load van, and register at the Talkeetna ranger station.

4:00 pm: Drive to the airport, organize loads for fixed-wing flights.

4:30 pm: Fly onto the glacier. Establish camp: probe and wand the perimeter, build walls, make sleeping platforms, set up group kitchen, and establish the bathroom.

6:00 pm: Make dinner. Evening meeting: Snowpack and weather observations, avalanche observations. Sleeping warm.

# Day 2

7:00 am: Group breakfast.

8:00 am: Daily morning meeting on current weather, weather forecast, red flags present, critical factors, avalanche problems.

9:00 am-12:00 pm: Roping up for glacier travel, crevasse fall scenarios, transceiver searches, leave camp on a tour.

1:00 pm-6:00 pm: Ski tour. Snow test pits.

# Day 3

All day ski tour.

# Day 4

Move camp. Afternoon ski tour.

# Day 5

All-day ski tour.

# Day 6

All-day ski tour.

# Day 7

Move back to air strip. Student-led rope teams head back to the airstrip. Fly back to Talkeetna. Clean up and de-issue gear, write evaluations, and say good byes.