

# Course Description

## Waddington Range Mountaineering

### Features Of This Course:

- Extensive glacier travel and peak ascents
- Elevations up to 13,000
- Potential for severe, unpredictable weather
- Remote, rugged terrain
- Extensive travel above tree line
- Strenuous off-trail travel on steep terrain and through thick underbrush; heavy packs
- Snow, ice and rock mountaineering skills
- Avg. group size: 12 students / 3 instructors
- Minimum age: 17
- Average age: 22

### The Expedition

For 28 days you will have the opportunity to explore British Columbia's Waddington Range, a little known and seldom-visited mountain range. A succession of long fjords, flanked by vertical walls, leads into the jagged peaks and sprawling ice fields that compromise the range. Most of the range is covered with enormous ice fields, and boasts some of the longest glaciers in sub-arctic North America. Within this stretch of remote and rugged mountains, you will embark on your expedition. You'll travel for four weeks surrounded by steep mountains, snow, ice and dense coastal forest. You'll learn techniques of alpine and glacier mountaineering, off-trail travel and dense bushwhacking, and camping in all weather conditions – all the skills needed for you to carry out remote mountaineering expeditions and explore rugged, mountainous terrain.

The remoteness of the region and potential for extreme weather, stymie many mountaineers who head into the range. Getting into and out of the mountains requires bushwhacking through dense, old growth forest and on most routes a flight in, or out, by bush or float planes. Given the inherent uncertainty, you must approach the expedition with a flexible attitude. Conditions and weather permitting, the course will attempt a variety of peaks, usually in small climbing parties. Expect pre-dawn "alpine" starts and long days, as elevation gains of 2,000 - 5,000 feet from camp to summit are common. Prudent route selection and constant adherence to risk management practices help minimize exposure to the inherent dangers of crevasses, rock fall, avalanches and harsh weather.

Your development as a mountaineer will begin with the basics. Learning to "live well" and to care for yourself, your fellow expedition members, your equipment and the environment in a variety of conditions are the foundation for advanced mountaineering and the focus of our core curriculum. As you bushwhack through thick forest and undergrowth on your way to the glaciers, you'll master camping, cooking and basic travel skills. You will live with three or four other students in a "cook" group. These small groups help disperse impact on the land and enable you to master the art of backcountry cooking and living. En route, your group might be challenged to negotiate slopes of loose scree and dense vegetation or large, crevassed glaciers, and you'll constantly employ techniques to minimize the chance of a confrontation with bears and other wildlife.

Once you reach the glacier, you'll move into the climbing curriculum beginning with knots, rope handling, rope team travel, self-arrest and belaying. You'll spend time practicing these skills and learning to live and travel responsibly in glaciated terrain. The hiking distances covered daily will be short at first, giving everyone a chance to get used to the heavy packs, and rope team travel.

As your experience builds and you move into more technically demanding terrain, you'll be exposed to more advanced skills such as crevasse rescue, route finding on a glacier, avalanche hazard assessment, and the use of 4<sup>th</sup> and potentially even 5<sup>th</sup> class rope systems for protection during more exposed travel. There will be days set aside for classes and skill practice or peak ascents when you will not move camp, but you should be aware that a number of factors often preclude successful summit attempts. Your course will take advantage of every opportunity to prepare you for future expeditions in glaciated ranges, and the primary focus of this course is the development of skills and judgment, not "peak bagging".



Group dynamics and leadership are other integral parts of our core curriculum. You'll learn how to live and work closely with your course mates while you travel through the mountains. Having tolerance for adversity and uncertainty, willingness to work hard, and respect for your comrades will be critical to the success of the expedition as a whole. Because of the diverse and difficult terrain typically encountered on these courses, there may be fewer opportunities for student leadership on travel days than is common on most other courses at NOLS.

### **Student Independence**

On all NOLS courses students will be independent (unaccompanied by instructors) at various times. This includes time in and around camp such as while cooking or performing camp chores. Instructors may allow students to travel away from camp. Students often have independent unsupervised time, usually in town, before and after their course starts.

### **Independent Student Group Travel**

An emphasis of this course is the development of skills that permit you to be self-sufficient in remote backcountry areas. Our teaching progression for accomplishing this is carefully planned and executed. Initially travel groups, usually of four to six students, will include an instructor who will teach travel skills and leadership. Gradually, as you gain proficiency, the instructor will allow you to take on more responsibility and make more of the decisions. When you have demonstrated the necessary competency to the instructors, you may travel in student-led groups without instructors for a day at a time as you hike from camp to camp. We call this daily independent student travel and it is an effective educational tool. It allows you to practice travel skills and leadership and gives you responsibility for the outcome while still having indirect supervision by instructors and the benefit of the NOLS support systems. This type of independent group travel is more commonly done off glaciers. Much of the time on this course will be spent on glacier, so the independent travel time will be limited.

Due to the technical nature of the travel on the Waddington Expedition, multi-day Student Expeditions, when students travel for multiple days without instructors, is not a part of this course.

### **Weather and Other Challenges**

Mountain weather is fickle. On any given day, temperatures may range from below freezing to T-shirt conditions. Courses may experience snow, rain, or long stretches of sun and blue skies. Whether the Pacific Ocean is experiencing an El Nino or La Nina condition can be cause for large swings in weather patterns in the Pacific Northwest.

Mountaineering in the Coastal Range of British Columbia, while it can be tough, remains a great learning ground for future mountaineering of all types. You will negotiate glaciers, crevasses and icefalls and walk on loose, shifting boulders. Much of the traveling is on steep terrain requiring precise movement. Often you'll be off-trail bushwhacking through thick forests or scrambling in boulder fields. Early summer season courses may spend much of their time camping and traveling on snow. You will traverse steep slopes of snow, loose rock or grass, and grunt up high mountain passes, at times gaining 4,000 - 5,000 feet in a day. The heavy packs and steep terrain can be hard on your knees and feet if you are not used to this type of travel. You'll be miles from the amenities of civilization. Telephones, ambulances, and hospitals may be several days away.

Identifying and managing mountain hazards—falling rock, weather, moving water and steep terrain (risks that could result in injury or death)—will be a constant theme in our instruction. Camping may involve dealing with swarms of mosquitoes or hanging your food to keep it away from bears or other animals. Managing risks and assuming responsibility for yourself and your colleagues will help make your expedition in these wild and beautiful mountains healthy and fun.

### **Personal Electronics**

A key element to a NOLS education is time spent in wilderness. The benefits of this include being closer to nature, time away from society and civilization, and being in an environment where natural forces predominate and students have the opportunity to develop good judgment and practice self-reliance. NOLS does not permit students to use personal cell or satellite phones or other communication devices including personal tracking devices (e.g. SPOT), while in the field. Additionally, students are not permitted to take personal music players (iPods, MP3 players, CD players, etc). Instructors will be carrying sufficient communication equipment (usually a satellite phone) to handle any emergencies that may arise.



## **Physical Challenge**

You can expect that your group will encompass a wide range of physical abilities and comfort limits: While many of our students are both mentally and physically challenged on their course, some find that they were not as challenged they had expected or hoped they would be. You will get so much more out of your course if you can dedicate energy to things other than just making it to camp in good style on a moderate hiking day.

Assess your fitness level well in advance of your course and review the fitness recommendations in your enrollment packet to design an appropriate fitness goal and plan for yourself.

You will have long, busy days on your expedition; your fitness goals should focus on being able to sustain a moderate level of exertion for hours on end rather than “quick sprint” fitness.

Focus on a well-rounded routine that emphasizes stamina, endurance, flexibility and strength. Finally, don't ignore the need for balance; this will serve you well in the moraine and boulder fields where the ability to quickly find your center of balance as you move from one step to the next will enable you to dance, rather than stumble your way through. Play with it. Good luck, and have fun!

## **Medical Issues**

Please be aware that chronic knee or ankle ailments have been a source of problems on this course in the past. If you have a history of such issues, please contact us to discuss it. It is important that the admissions office is advised of any updates to your medical records.

**Medications:** It is important that you have a current diphtheria-tetanus immunization. We need to know if you have had an adverse reaction to Erythromycin, Vicodin, Keflex, Ibuprofen, or Aspirin. If you plan to take any medication during the course, please be sure you are aware of possible side effects and discuss it with your expedition leaders.

## **Course Objectives**

Each course is unique due to variables such as route, group dynamics, fitness levels and environmental conditions. Within the given parameters, we intend to accomplish the following objectives in five areas:

### **Risk Management, Judgment and Decision-making**

NOLS teaches wilderness visitors to practice responsible habits that promote the health and well being of self and others. Each student is expected to:

- Demonstrate knowledge of the hazards in a mountain environment
- Consistently perform specific techniques taught on the course to reduce or avoid hazards
- Describe an emergency plan for a group in the outdoors
- Demonstrate the ability to perform basic emergency procedures to support a patient until help arrives
- Use experience and judgment to implement sound decisions and follow them through to completion
- Display sound judgment and an awareness of group and self limits

### **Leadership**

Students are exposed to the theory and practice of outdoor leadership, teamwork, and expedition behavior. At NOLS, expedition behavior involves commitment to the group, acceptance of others, and cooperation to achieve goals. Each student is expected to:

- Work effectively as a member of a team, displaying a positive attitude despite hardship
- Effectively communicate ideas and concerns on an individual and group level
- Accurately identify personal strengths and areas for growth in developing outdoor leadership
- Take responsibility for learning through setting and attaining personal goals
- Take initiative in teaching and leadership roles with peers
- Respond to problem situations using decision-making and planning skills
- Provide effective oral and written feedback



## **Outdoor Skills**

NOLS students learn to live and travel in mountains within a framework of personal health and care of the environment. Each student is expected to:

- Live comfortably in a mountain environment, learn to camp, cook, and dress for a variety of conditions
- Travel competently in mountainous terrain using map and compass skills, off-trail navigation, hazard evaluation, route-finding techniques, bear camping and river- crossing techniques
- Accurately assess skills, strengths and endurance in self and others and conservatively apply those limits to given situations

## **Mountaineering Skills**

While advanced skill emphasis will vary, students can expect to be exposed to a complete foundation of basic glacier mountaineering skills and will be expected to:

- Correctly tie fundamental climbing knots and display efficient rope-handling techniques.
- Demonstrate appropriate crampon and ice-ax techniques for snow, ice and mixed terrain.
- Display appropriate belay skills in a variety of mountaineering systems (rope-team, running belay, etc)
- Competently build simple snow and ice anchors.
- Recognize a safe route through crevassed terrain and where avalanches are a hazard.

## **Environmental Studies**

An integral part of every NOLS course is to raise students' awareness of their impact on the natural world. Each student is expected to:

- Consistently perform minimum-impact living and travel skills by following Leave No Trace principles
- Display basic natural history observational and interpretive skills and use them to demonstrate an understanding of and respect for the course environment
- Discuss the history and potential solutions relevant to pertinent environmental issues
- Demonstrate basic knowledge of and respect for local cultures
- Reflect on the transference of wilderness ethics and practices into daily personal and professional life

