

# Course Description

## Semester in the Rockies

### Features of this Course

- Minimum age: 17
- Average age: 20, Gap Year Semester: 18
- Average group size: 12–15
- Average pack weight: 45-55 pounds
- Wilderness First Aid or First Responder Certification

### The Expedition

The National Outdoor Leadership School (NOLS) Semester in the Rockies is a leadership semester full of fun and challenging adventures based in experiential education. Depending on your exact semester, you may camp and travel in some of the following states: Wyoming, Colorado, Idaho, South Dakota, Utah, Nevada or Arizona. You will be in incredible wilderness areas in remote locations. You will enjoy the wonders of living outdoors: sleeping under the stars, eating a warm meal at the end of a long day, telling stories around a fire, and waking up to the sound of birds. During your particular semester, you will also be introduced to a variety of adventure-based skills such as rock climbing, backpacking, whitewater boating, backcountry skiing, mountaineering, and canyon travel. This is the semester of a lifetime and one that will provide you with the skills you need to pursue outdoor adventures on your own.

The experiential approach of a NOLS semester focuses on hands-on application of new skills and learning through personal experience. Your instructor team changes from section to section, to ensure you are taught by the most highly qualified educators we can offer.

Your course will begin in Lander, Wyoming. Some courses return to Lander between sections, while others remain on the road, stopping at small towns or campgrounds to shower and reorganize equipment. The expedition continues through transitions, and you may or may not have the opportunity to do laundry in between sections. Due to the long travel distances between section areas, you will spend several full days in transit. The final day of the semester is spent de-issuing equipment and finishing evaluations in Lander. That evening, there is an end-of-course banquet.

### Semester Options

You can choose from a number of different combinations of activities—backpacking, mountaineering, winter backcountry skiing, rock climbing, river travel, canyon travel, wilderness first aid (WFA) or wilderness first responder (WFR)—to ensure your semester provides you with the skills you want to learn (see the NOLS catalog or [nols.edu](http://nols.edu) for specific combinations and dates). Each section builds skills and experience, developing you into a competent wilderness traveler and leader.

### Backpacking Section

- Trip duration: 12–24 days
- Average pack weight: 45–55 lbs
- Average group size: 12–15 students / 3 instructors
- Hiking route: 40–80 miles

### Environment

Our wilderness backpacking sections travel through either the Wind River or the Absaroka mountain ranges of Wyoming. Varied mountainous terrain—snow-capped peaks, glittering alpine lakes, deep valleys and high alpine plateaus—will be encountered during this section. Altitudes range from 8,000 feet to greater than 13,000 feet, with tree line being near 11,000 feet. Elk, deer, moose, bear and bighorn sheep all inhabit the high country of these ranges. The mountains are magical in the autumn. You'll hear elk bugling, camp in aspen glades splashed yellow and gold by the changing leaves, wake to frost decorating the trees, and see very few people once you leave the bus.

### Section Progression

Expeditions, unlike the college classroom, are influenced by weather, terrain, the group's health and skills, experience, and ability. We can't script our courses, as tightly as the traditional classroom, but to give you a sense of the experience, we'll describe what your days may be like.



Wilderness expeditions often hike three out of every four days. Backpacking in small hiking groups lets you learn to lead and travel as we move through beautiful wilderness. The day begins early when you start your stove, cook breakfast, organize and pack your pack, and enjoy breakfast. We're usually hiking by mid-morning. Lunch on the trail might be bread you baked the day before, or a trail mix of nuts, cheese, and dried fruits. You may stop for a short class on natural history or GPS navigation, or to learn how to cross a river, travel over boulders or snow, or traverse a high pass. When we arrive at our new camp location we'll first spend time choosing a Leave No Trace site and organizing camp, then we'll prepare dinner. If the day was long, a short evening meeting may wrap things up. If the day was short, we may fit in a class or discussion.

The difficulty of a hiking day is hard to predict. Long miles on trail may be physically easier than climbing a high mountain pass or a day spent hiking through boulders and fallen timber in a wilderness without trails. Your pack may be lighter than usual as you approach a food re-supply day, or you may be carrying extra gear to lighten the load of a course mate who is not feeling well. The wilderness has a knack for providing challenges to all.

We'll occasionally have a layover day to rest, enjoy a special location, teach a class, or climb a peak.

Technical climbing is sometimes taught on the wilderness backpacking section. Additionally, your instructors may employ ropes to manage steep hiking terrain.

### **Independent Student Group Travel**

An emphasis of this semester, and often this section 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 instructors 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 travel 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.

### **Mountaineering Section**

- Trip duration: 24–30 days
- Average pack weight: 60–70 lbs
- Average group size: 12–15 students / 3–4 instructors
- Hiking route: ~65 miles
- Emphasis on technical climbing

### **Environment**

The mountaineering section takes place in the Wind River Mountains, a range that is world renowned for the quality of its climbing. Like the backpacking section, on the mountaineering section you will travel from camp to camp in small hiking groups, live in small "cook groups," practice basic outdoor living skills and Leave No Trace techniques, and will practice daily independent student travel. The main difference between the two sections is that on the mountaineering section, your focus will be on climbing. This focus dictates the length of your route and the location of your camps.

You'll start with the basic mountaineering skills of rope handling, knot tying, gear placement, belaying, and movement. As weather and time allow, you will then apply these skills to top-rope climbing on short crags, possible multi-pitch ascents of longer routes, and summit attempts on high peaks. If appropriate conditions exist, snow and glacier travel techniques are taught, but this is primarily a rock climbing course because of the season. When you attempt high peaks or long routes, your day's activities begin before dawn to ensure the best chance of success.

When mountaineering, you will climb on or above sheer granite cliffs where loose rock and patches of snow or ice require precise movement. You will learn and practice rope and protection systems to minimize the danger of falling. Unforeseen changes in weather can be especially hazardous if you are in the middle of a climb or on a high pass where the possibility of retreat is limited.



## **Climbing Section**

- Trip duration: 10–21 days
- Average group size: 12–15 students / 3–4 instructors

### **Environment**

This climbing section takes place in areas rich in climbing tradition, with high-quality rock, beautiful scenery, and challenge for all levels of climbers. Some sections take place in the Needles/Mt. Rushmore area of South Dakota and Devil's Tower, Wyoming; some utilize Split Rock, Larkin Dome, Fremont Canyon, and/or Sinks Canyon in Wyoming; while others go to Red Rocks, Nevada; City of Rocks, Idaho; Unaweep, Colorado; or the House Range of Utah. These are popular recreation areas. You may use vehicles every day and climb near other people.

### **Section Progression**

You will operate out of a base camp where Leave No Trace practices will take more effort due to your prolonged stay in one spot. At some point, to minimize impact and experience different rock types and climbing opportunities, you may move to a different climbing site. You will climb as part of a large group when top-roping, but will be in smaller groups of three or four when doing multi-pitch routes.

Instruction will progress from the basics of movement on rock, knots, rope handling, and belaying to protection placement, anchors, rappelling, and rope-system management. Plan to spend a lot of time on the rock. More advanced topics such as fixed-rope ascension, direct aid, and cliff rescue may be addressed. There may be opportunities to lead climb if you master the full curriculum. Instructors will evaluate you to ensure thorough preparation prior to leading.

NOLS climbing instructors are selected for their teaching ability as well as for their technical expertise. They emphasize building a non-competitive attitude toward climbing, developing your natural abilities, and progressing at your own speed.

To learn rock climbing, you will climb and rappel on or above sheer cliffs where loose rock and steep terrain require precise movement. You must master rope and protection systems to minimize the danger of falling. Unforeseen changes in weather can be especially hazardous if you are in the middle of a climb where the possibility of retreat is limited.

Climbing is a very weather dependent activity. We attempt to schedule courses so that you will have good weather, but due to many variables beyond our control (permits, available areas, and not the least, weather itself), we cannot guarantee this. You should come prepared to spend a lot of time on the rock, but realize that this does not always happen. We will do everything possible to make your time productive, but only self-motivation can help overcome the “bad weather blues.”

## **River Travel Section**

- Trip duration: 16-18 Days
- Average group size: 12–15 students / 2–5 instructors
- Travel by kayak, raft and/or canoe
- Combination of flat water and whitewater

### **Environment**

River travel sections take place either on Utah's White, Green or San Juan Rivers, or on the main Salmon and Snake Rivers of Idaho. Each of these rivers is full of geological diversity, human history, and unique flora and fauna. As you travel through the limestone and sandstone canyons, you will live in a lush riparian zone surrounded by incredible scenery. At times, the narrow canyons open into wide valleys where the views are expansive. At other times, rock walls will tower over you, leaving just a ribbon of sky overhead. Few people inhabit these rugged environs, and the rare road serves as both a put-in and take-out point along the rivers. This remoteness helps preserve populations of deer, bighorn sheep, and mountain lions.

### **Section Progression**

With support of the NOLS bases in Vernal, Utah or Salmon, Idaho, you will be issued personal and group gear. Depending on water levels, time of season, and permit availability, you may travel by kayak and raft and/or canoe. In each case, you will learn to read the water, identify hazards, and respond appropriately.

Initial instruction will teach you to rig and load your craft, apply conservation techniques pertinent to river environments, and use some new camping practices. As you travel, you will learn basic strokes, maneuvering, crewing and captaining skills, elementary river hydrology, group travel principles, and simple rescue techniques.



Once you master the fundamentals, more advanced instruction in strokes and river hydrology are presented. You will learn to perform eddy turns, peel-outs, and ferries. To paddle swift water, you need to learn stroke combinations, timing and communication. As your expertise grows and the travel becomes more challenging, you must scout rapids and employ measures to ensure your party's well being. Exercising leadership in these situations challenges your hazard evaluation, as well as your communication and decision-making skills.

While on the river, expect to examine the natural history of the area. The contrast between the wet river corridor and the spectacularly exposed geology makes a perfect classroom for studying plants, animals and ecosystems. Rivers are a popular wilderness resource, and their use involves special management and conservation concerns. You will discuss these issues, as well as wilderness ethics specific to the river environment as you travel.

On some sections, you may spend a day near the middle of the section being transported to another stretch of river. Here, you will de-rig, pack, unpack, and re-rig all the gear. This gives you a break from river travel, and offers the opportunity to move to a more challenging stretch of water.

On kayak/raft sections, cooking chores rotate, with three or four people doing a single day's cooking for the entire group—a common practice on river expeditions. Everyone will share daily tasks such as setting up and taking down camp and rigging and unloading boats. On canoe sections, you will cook in the three- or four-person groups that are standard at NOLS.

You should expect cold water temperatures and weather that varies anywhere from hot sunshine to snow, or dead calm to fierce headwinds on this section. Large, crashing waves, shallow water, hypothermia, sun exposure, re-circulating hydraulics, fallen trees that can trap a person underwater, or strong currents that can pin paddlers against rocks are some of the hazards you may face on this section.

### **Canyon Section**

- Trip duration: 21–30 days
- Average pack weight: 50–60 lbs
- Average group size: 8–10 students / 2 instructors or 12–15 students / 3 instructors
- Hiking route: 70–120 miles

### **Environment**

On this section, you will backpack through a unique and beautiful region—the canyon country of the Colorado Plateau, located in southern Utah and northern Arizona. This area is characterized by rugged terrain and delicate beauty, with red sandstone and green junipers adding color to the arid landscape. You may see relics of the Anasazi culture in the form of pueblos, petroglyphs, and potsherds. At certain times you will travel across the mesa tops with spectacular vistas in all directions while at others you will wind your way through the labyrinthine depths of the steeply incised waterways that give this region its name.

Canyons are known for impassable pour-offs, slick-rock terrain, the possibility of flash floods, spiny plants, and the rigors of a climate where water is often scarce. You may experience temperatures that drop below freezing and storms that leave snow to hike through.

### **Section Progression**

While in the canyons, you can continue to develop the wilderness travel skills you learned on earlier sections. Map reading and route finding can be tricky in this convoluted country. You will learn the intricacies of GPS and compass use to negotiate the canyon terrain. Your travel days may range from three miles of dense bushwhacking and wading to ten miles of flat mesa walking. You may be challenged by the difficulty of minimizing your impact in an area where the soil is fragile and where the water you once took for granted is hard to find.

Some canyon areas in which we travel have smaller group size limits than the size of your semester group. In these areas, you will travel in smaller groups of 8 students and 2 instructors. Two semester groups of 12–15 students (24–30 total) are divided into three hiking groups of 8–10 students each for the duration of the canyon section. As on the backpacking and mountaineering sections of the semester, you may practice independent student travel in the canyons.

In addition to learning to live and travel in the desert, you will gain an understanding of the area's natural history and geology.



Here, exposed landforms provide textbook illustrations of the land's geologic past, and lush riparian zones contrast with stark expanses of rock, sand and blackbush. Prehistoric Indian cultures once thrived in the region, and you may view the remains they left tucked into alcoves.

### **Solos**

On this section you may have an opportunity to do an optional “solo” where you spend a day and night alone. There is no hiking during the solo. Many people find this experience a good way to reflect on the course and immerse themselves in the environment.

Fasting is an optional part of the curriculum for the solo. If the instructors think fasting is appropriate for the conditions and student abilities the students may choose to fast during the solo. Rations will be available to allow students to eat in the event of an emergency.

### **Student Expeditions**

This course may culminate in a Student Expedition. After successful practice with daily independent student travel and if your instructors think your group is ready, the instructors will help you divide into student expedition groups (usually four to six students each). With instructor oversight, each group will then select a leader and carefully plan and execute a multi-day independent student-led expedition. This part of the course builds on the skills you've learned and practiced and allows you to travel without instructors for up to four days. Students are aware of where the instructors and the other student groups are planning to travel and camp. Each Student Expedition group will carry an emergency locator beacon that when activated in the event of a serious emergency will initiate a response from local search and rescue agencies. The instructors with a satellite phone may be up to 24 hours away from the students. Our students often say the student expedition was the highlight of their course.

It is possible to have student expeditions take place on the backpacking section and the mountaineering section, as well as the canyon section.

### **Winter Section**

- Trip duration: 11–15 days
- Average pack/sled weight: 70 lbs
- Average group size: 12–15 students / 3 instructors
- Skiing route: ~25 miles

### **Environment**

The winter section is a great way to conclude a fall semester. The snowy regions of the incredible Rocky Mountains provide a perfect environment in which to learn backcountry skiing and winter camping. You'll visit either the Wind River Range, the Gros Ventre Range, the Wyoming Range, the Snake River Range, or the Absaroka Range of northwestern Wyoming, all of which turn into winter wonderlands with the coming of autumn snows.

The demanding winter environment challenges you to put into practice all the skills and tricks you have learned over the semester. Conditions at this time of year can be quite variable, ranging from mild temperatures and little snow, to cold temperatures and deep snow. Cold (possibly sub-zero) temperatures mean you must exercise constant care to minimize the possibility of hypothermia and frostbite. In these mountains, avalanches are common and can bury unwary skiers. Predicting the likelihood of an avalanche has similarities with weather forecasting: experience and practice help refine your “judgment”, while understanding risk management in avalanche terrain can be a lifelong pursuit.

### **Section Progression**

You will begin by learning the basics of snow camping, skiing, waxing, avalanche risk management, snow physics, cold-weather physiology, and winter ecology. Of particular importance is the development of a personal commitment to cold-injury prevention and close group teamwork. You will construct snow shelters, including igloos, quinzhees, or snow caves. From these snug shelters, you will take day trips through terrain few people experience in the winter. Opportunities abound to practice Nordic skiing, study avalanche assessment, and maybe even track a weasel. When moving camp, you will ski with a pack and may pull a sled to transport group gear and rations. If good weather and snow conditions permit, you may attempt to climb a peak.



### **Wilderness First Aid Section (WFA)**

The semester curriculum features a WFA course that focuses on first aid training specifically applicable to wilderness situations. Staff from the Wilderness Medicine Institute of NOLS will teach this course. Fast-paced and hands-on, this two-and-a-half day course covers a wide range of wilderness medicine topics for people who travel and work in the outdoors. This course is pre-approved by such organizations as the American Camping Association, the US Forest Service, the US Coast Guard, and other governmental agencies.

### **Wilderness First Responder Section (WFR)**

Some fall semesters include WFR training. This is an 80-hour course, taught by staff from the Wilderness Medicine Institute of NOLS. It will be held during a nine-day base camp. This is the standard course for outdoor professionals and provides you with the tools to make critical medical and evacuation decisions in remote locations. Half of your time will be spent completing practical skills, case studies, and scenarios designed to challenge your decision-making abilities.

### **Weather and Other Challenges**

Given the altitude and latitude of the areas you will be in, cold and snowy conditions can occur any month of the year. Weather can change quickly from soothing sunshine to chilly rain or snow; fall storms can be sudden and exciting. There are times when you will manage cold and wet conditions feeling tired, but you will learn a lot and smile with a feeling of self confidence while staring down adversity.

Bear avoidance techniques will be integrated into mountain hiking and river sections. Precautions against bear encounters will decrease the opportunities for solitude and privacy on this course. You will protect food from bears for mountain hiking sections. Other bear avoidance tactics include meticulously maintaining cleanliness at the cooking sites and making loud calls to warn bears of your presence.

Identifying and managing the environmental and location-specific hazards is a constant theme in our instruction. Your expedition in these beautiful and untrammled wildlands will remain healthy and enjoyable if you assume responsibility for yourself and other group members and consistently practice risk management.

### **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.

### **Student Independence**

On all NOLS courses, students will be independent (unaccompanied by instructors) at various times. This will include 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 the field portions of their course.

### **College Credit**

A student can elect to earn up to 19 credit hours (16 if your semester does not include WFR) through the University of Utah for successfully completing the Semester in the Rockies. Please see the college credit paperwork enclosed in your packet.

A key educational tool will be ongoing verbal coaching and feedback throughout the semester, with written performance summaries at the end of each section, whether you are receiving college credit or not.



## Course Objectives

Each semester is unique due to variables such as route, group dynamics, fitness levels and environmental conditions. Working with these variables, it is our intent to see each student accomplish the following outcomes:

### Leadership and Teamwork

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:

- Accurately identify strengths, skills, and areas for growth in outdoor leadership
- Support others in their development and growth
- Take responsibility for learning; set and attain personal goals
- Take initiative in teaching/leadership roles with peers
- Help plan and participate in an environmentally sound, multi-day, student-led small group expedition
- Work effectively as a member of a team; display a positive attitude despite hardship
- Initiate resolution of interpersonal conflicts
- Play an active role in defining group goals and expectations; demonstrate initiative in activities and tasks

### Outdoor Skills

NOLS students learn to live and travel in the wilderness within a framework of personal well-being and care of the environment. Each student is expected to:

- Live proficiently in all course environments; dress effectively for a variety of conditions
- Demonstrate environmentally sensitive and efficient campsite selection and tent, or tarp, set-up skills
- Prepare nutritious cooked meals using a camp stove or fire
- Use topographic maps and compass to travel competently in challenging mountain and canyon terrain
- Use off-trail navigation and route finding to mitigate terrain hazards
- Take responsibility for the care and organization of personal and group equipment
- Exhibit good personal hygiene
- Display fundamental skills in technical pursuits: skiing, climbing, caving, river travel

### 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 demonstrate sound *Leave No Trace* living and travel skills on personal and group levels; be able to apply this knowledge to varied settings
- Show an understanding, appreciation and respect for the natural world; know characteristic flora and fauna of this region
- Discuss the history of pertinent environmental problems and offer potential solutions
- Demonstrate familiarity with the geography of the intermountain west
- Display a broad elementary knowledge of field natural history including: geology, ecology, ornithology, mammalogy, botany, meteorology and snow science; focus on active, observational study
- Demonstrate a knowledge of public land management and discuss the means to be involved in issues of interest

### Risk Management 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 the varied environments encountered and apply this knowledge to new environments
- Consistently perform specific techniques to reduce or avoid hazards
- Formulate and show the ability to implement emergency plans for groups in the outdoors
- Display sound judgment and decision-making skills based on knowledge of equipment, the wilderness environment, other expedition members, and one's own limits
- Demonstrate the ability to prevent, evaluate, and care for medical problems in wilderness settings
- Successfully complete the Wilderness First Aid or Wilderness First Responder program

**As a result of this course, we expect our students to be competent and responsible wilderness travelers and leaders.**

