Course Description
Yukon Backpacking

Features Of This Course:

- Remote travel in a vast wilderness
- 120 - 150 km of off trail travel
- Focus on expedition skills and leadership
- Nearly continuous (20-22 hrs) daylight
- Average Age: 20
- Minimum Age: 16
- Average Group Size: 15 Students / 3 Instructors
- Extensive alpine tundra
- Bushwhacking in thick willow and birch
- Boreal forest ecosystem with caribou, wolf, sheep and moose sightings possible
- Opportunity for a student expedition
- Bear awareness and risk management
- Diverse weather with potential for prolonged periods of wet, cold weather

The Expedition

The Yukon Territory offers vast expanses of remote trail-less wilderness and intact ecosystems. Your expedition will travel in one of the following ranges: the Ogilvie, Pelly, Ruby, Coast, Cassiar or Selwyn Mountains. Each area sees few travelers and offers opportunities for extensive off-trail travel and exploration. After the winter season, these Yukon mountains come to life for a brief and intense summer of almost continuous daylight.

For a month, the mountains of the Yukon will be your home as you hike and experience a truly wild place. Bushwhacking through head-high tangled willows, fording swollen rivers, crossing steep slopes and dealing with widely varied weather will all be part of your adventure. You'll work hard, but you'll reach places few have ever been. You will learn the skills you need to backpack in primitive mountain areas and work with a team through diverse challenges long after your course ends.

These skills begin with the basics—bear country camping, cooking, map reading, stove use, Leave No Trace techniques, and sanitation—which are the foundation for backcountry travel. The expedition format emphasizes hands-on learning and the application of outdoor skills in varied situations. Students have opportunities to learn and practice route finding, river crossings, plant and track identification, and first aid and emergency procedures.

This course emphasizes skills that permit students to be self-sufficient in remote backcountry areas. Leadership and judgment are stressed throughout. As students become comfortable with map and compass, route finding, and their own leadership, there may be opportunities for the course to split into small student-led groups for several days at a time. Hiking days vary from easy to strenuous and will be broken up with an occasional layover day that allows time for classes, baking, repairs, reflection and exploratory group hikes.

During your course you will live with two or three other students in a "cook" group. These small groups disperse the impact on the land and enable you to master the art of backcountry cooking and living. Learning to be a contributing member of an expedition is very important and is often an aspect of the course where students find unexpected personal reward and challenge. The bonds formed while working together will be a large part of your NOLS experience.

Group dynamics and leadership are an integral part of our curriculum. You'll learn how to live and work closely with your course mates while you travel through the mountains. Bringing a tolerance for adversity and uncertainty, respect for other group members, and a willingness to work hard are critical to success. As your group gains leadership skills and experience working together, you can expect your instructors to give you more responsibility for leading yourself and your peers. You should expect ongoing verbal coaching and input throughout the course, with written performance summaries at the end. This feedback takes place whether or not one is receiving college credit.

Throughout the course, students live outdoors, prepare their own meals, and care for themselves. No prior backpacking experience is necessary to take this course, although the remoteness of the area requires everyone's total commitment to teamwork and risk management.

This course will not teach roped climbing. Some courses may be exposed to very basic snow travel and ice-axe use. Fishing is dependent on route and student desire, but some courses experience excellent fly and spin fishing opportunities for grayling, char, lake and rainbow trout.

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 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 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 five days. Students are aware of where the instructors and the other student groups are planning to travel and camp. The instructors with emergency communication capability may be up to 24 hours away from the students. Our students often say the student expedition was the highlight of their course.

* This is grizzly bear country. Thus, student expedition groups are typically a minimum of four.

Weather, Remoteness and Other Challenges
It is important to emphasize the nature of this wilderness experience. The following descriptions are intended to have you mentally and physically prepared to get the most out of your course.

Backpacking in the Yukon Territory is physically and mentally demanding. The Yukon is a very remote region with large distances from medical facilities once in the field. While the Yukon Territory of Canada is fully functional with all the emergency services available to most North American centres, even in ideal conditions, an evacuation would take several hours. Add the likely element of poor weather, outside help might be several days away. Your expedition must be prepared to deal with almost any event self-sufficiently.

While average humidity and precipitation in this area are moderate, the weather can change quickly from hot sunshine to rain, sleet and hail, and from dead calm to fierce winds. In a wet year it could be rainy and cold every day. It is not uncommon for a hiking group to be soaked to the skin while bushwhacking! Light snow is always a possibility.

This is bear country (grizzly and black) and all travel and camping practices emphasize bear risk management and awareness. Some examples include making noise while traveling and never leaving food in tents. One basic bear country practice is to never leave camp on one's own. Students should not expect to have much time alone on this course.

Bushwhacking—forcing one's way bodily through thick brush—can occupy entire days and can be one of the most challenging aspects of the course. Rewards of a NOLS course are proportionate to the challenge – If you are mentally prepared for this challenge and welcome it, you will receive more from your course.

There are plenty of insects in northern Canada, and we'll deal with them in good expeditionary style. Mosquitoes, black flies and no-see-ums are at their worst through early July, as they maximize their activity in the short summer.

Group Dynamics
For two weeks you'll be living and working in a small community of diverse individuals (be that age, outdoor experience, occupation, or other standard measures of diversity). Whether it's pushing through dwarf birch feet from one another, or camped in a confined campsite, living and working quarters are tight, necessitating the utmost in cooperation, patience and tolerance. Please consider the ramifications of this prior to committing to the expedition, and recognize that the success of the expedition as a whole is entirely dependent on the ability of its members to support one another in trying circumstances.

Some of the course routes may involve exploration into new areas. Consequently, a willingness to change plans and the desire to be challenged are both paramount.

Medical Issues
Please be aware that chronic knee or ankle ailments have been a source of problems in the past. If you have a history of such problems, 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.

Personal Electronics and Communication Devices
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. For this reason, students are not permitted to take personal music players (iPods, MP3 players, CD players, etc.), cell phones, satellite phones or other communication devices, including satellite/GPS trackers on NOLS courses. Instructors will be carrying satellite phones which are used solely to handle any emergencies that may arise.

Fitness Recommendations
Past students and instructors agree that arriving physically fit and with an open mind will enhance your experience and ability to do well on the course. Almost continual sunlight provides for long, busy days. Your fitness goals should focus on being able to sustain a moderate level of exertion for hours on end rather than "quick sprint" fitness. A healthy fitness level also reduces the chance of injury.

Focus on a well-rounded routine that emphasizes stamina, flexibility and strength. Finally, don't ignore the need for balance; this will serve you well in the mountains 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!

General Fitness Guidelines
Phil Watts, exercise physiologist at Northern Michigan University, conducted a research project in conjunction with several NOLS mountaineering courses in the North Cascades. The results of this study, in consideration of established principles of physical conditioning, have enabled development of the following general guidelines which should be helpful in evaluating and improving your physical condition if necessary.

Aerobic (or endurance) capacity is a major factor in mountain travel and most course activities. An individual should have an aerobic capacity which would enable him/her to **run 5-6 miles (8-10kms) in 40-55 minutes** or less three times a week

If you recognize a need for additional aerobic conditioning, begin at least 8-10 weeks prior to the start of the expedition and adhere to the following **F.I.T.T.** principle:

• **F**requency
  - Exercise 3-5 times per week.

• **I**ntensity
  - Exercise at about 60-80% of maximum effort. Use the "talk test;" if you are breathing so hard that you can't converse with a partner, you're working too hard - slow down a little.

• **T**ime

- Exercise sessions should involve an expenditure of about 300-600 calories per session. That's approximately the equivalent of:
  - 3-6 miles of jogging;
  - 10-25 miles of bicycling over rolling terrain;
  - 20-60 minutes of other aerobic activities such as cross-country skiing, swimming, etc.

• **T**ype - The activity selected should be "total-body" - involving the large muscle groups - and should be rhythmical and continuous; it should not be conducted in spurts like sprints and many team sports.

Most efficient gains will result from using training activities that are "specific" - that is, like the activity for which you are training. Since Backpacking is primarily a lower body activity, running and cycling are perhaps of more benefit than swimming, for example. Progress gradually to avoid over-stress and injuries. Work on Time (duration) first, and then begin to increase Intensity.

Flexibility (range of motion) exercise is also important and should involve stretching for all muscle groups. Select a number of stretches for all areas of the body. Stretch "easy" - don't bounce or over stretch. Maintain each stretch for 10-20 seconds and don't hold your breath or strain. You should feel tension not pain. Stretching should be done before and after each exercise session.

Developing adequate upper body muscular fitness for your expedition can be beneficial and relatively simple. Select a number of basic exercises for the upper body and abdominal areas such as push-ups, pull-ups, rope climbing, sit-ups, etc. Perform as many repetitions of each exercise as you can, resting between each exercise, then repeat. Do this basic workout three times per week or on alternate days. If you prefer working out with weights, follow the directions for the equipment you will be using or consult a reputable physical fitness text. Use strength training to supplement your aerobic program, not as a substitute for it.

While everyone has a certain amount of energy stored in the body as fat, excess body fat will increase the work intensity of all wilderness activities promoting early fatigue. Assessment of relative body fat usually requires one of several laboratory procedures and may not be available to many individuals. If you think you are significantly overweight, consult your physician about this well in advance of your course. Crash dieting would be a poor method of losing weight before your course. A good program of aerobic exercise, as described above and improved nutritional habits will usually suffice. We recommend any smokers quit immediately.

Hazards

A constant theme of our instruction will be identifying and managing the hazards of wilderness travel. The consistent practice of managing risk and assuming responsibility for yourself and other group members will help make your expedition through these mountains healthy and enjoyable. Your NOLS instructors will teach the skills and share the knowledge you need to handle these situations; even so, a good attitude is critical for ensuring the well-being and success of the entire group.

Upon graduating from the Yukon Territory Backpacking course, successful students should have the skills to responsibly and comfortably lead their friends/family on a short trip in similar terrain or on a longer expedition in an area supported by a trail network.

If you have questions, please contact the NOLS admissions office, 284 Lincoln Street, Lander, Wyoming 82520, or call 800-710-NOLS.

Course Objectives
Each course 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:

Risk Management and Judgment
NOLS teaches wilderness users to practice responsible habits that promote the health and well being of self and others. Objectives include the ability to:
• Demonstrate knowledge of the hazards in a mountain environment, e.g., rockfall, weather, river crossings, grizzly bears
• Consistently perform appropriate techniques to reduce or avoid hazards
• Be able to perform basic first aid skills to support a patient until help arrives
• Demonstrate the ability to develop a contingency plan for a group in the outdoors
• Display sound judgment and an awareness of group and self-limits

Leadership and Expedition Behavior
Students are exposed to the theory and practice of outdoor leadership, teamwork and expedition behavior. At NOLS, expedition behavior involves commitment to the group, a positive attitude and cooperation to achieve goals. Objectives include the ability to:
• Work effectively as a member of a team; initiate participation in group tasks and camp work
• Actively participate in the decision-making process; develop decision-making and planning skills including the ability to follow decisions through to completion
• Take responsibility for the health and well being of self and others
• Demonstrate sound expedition behavior, including commitment to group decisions and a positive attitude
• Show initiative in leadership/teaching roles with peers; employ leadership styles appropriate to the situation; support others in the leadership role
• Accurately identify personal strengths, skills and areas for growth in developing leadership styles
• Display an awareness of group strengths and limitations
• Take responsibility for learning through personal goals
• Appropriately and effectively communicate ideas and concerns on individual and group levels; demonstrate the desire and ability to problem-solve
• Assist in planning and participate in a student-led, multi-day Student Expedition

Outdoor Skills
At NOLS, our students learn to live and travel in the wilderness within a framework of personal well being and care for the environment. Objectives include the ability to:
• Dress appropriately for a variety of conditions; be punctual and organized
• Cook nutritious meals using a camp stove or fire
• Demonstrate appropriate campsite selection and shelter set-up
• Travel efficiently in mountainous terrain using map and/or compass
• Utilize off-trail navigation and route-finding techniques to mitigate hazards
• Experience basic spin and fly fishing techniques (if fishing is an option in the course area)
• Effectively use an ice ax for snow travel and self-arrest (if ice ax work is called for in the course area)

Environmental Studies
At NOLS, environmental studies encompasses natural sciences, ecological principles, environmental ethics, Leave No Trace camping, land management and cultural issues. Each student is expected to:
• Show an understanding, appreciation, and respect for the natural world; know characteristic flora and fauna of the Yukon; understand significant ecological principles
• Develop a sense of place and relationship to the land, recognition of the inherent value in wilderness and sense of responsibility to protect the environment
• Consistently perform sound Leave No Trace living and travel skills; be able to extrapolate knowledge to new environments
• Demonstrate a knowledge of public land management and discuss means to be involved in issues of interest in the North and elsewhere
• Demonstrate awareness and understanding of the Yukon's current and historic local cultures

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

Suggested Books and Websites

Lopez, Barry. *Of Wolves and Men*. New York, NY: Charles Scribner's Sons, 1978.
Lopez, Barry. *Arctic Dreams*. New York, NY: Scribner's, 1986.
Wright, Allen. *Prelude to Bonanza: The discovery and exploration of the Yukon*. Whitehorse, YT: Arctic Star Printing, 1980.
McClellan, Catherine. *Part of the Land, Part of the Water*. Vancouver, British Columbia: Douglas & McIntyre Ltd, 1987. ISBN #0-88894-553-1
Pielou, E.C. *A Naturalist's Guide to the Arctic*. Chicago, IL: University of Chicago Press, 1994.
Leopold, Aldo. *Sand County Almanac*. New York, NY: Oxford University Press, 1966
Heider, John. *The Tao of Leadership*. New York, NY: Bantam Books, 1986.

http://www.emr.gov.yk.ca/oilandgas/info/mapsdata.html (oil/gas)
http://www.mnh.si.edu/arctic/index.html (Smithsonian Institute Arctic Studies Center)
http://www.cyfn.ca/ (council for Yukon First Nations)
http://www.cnie.org/NAE/arctic.html (Native Americans and the arctic)
http://arctic.unep.net/index.cfm?issue=arctic_all (the UNEP arctic page)
http://www.mb.ec.gc.ca/nature/index.en.html (Environment Canada page)
http://www.canoemuseum.net/ (all about canoes)
http://www.emr.gov.yk.ca/ (Yukon gov. website)
http://taiga.net (northern Canada natural histoy)