

Course Description

Sonoran Year

Features Of This Course:

- Sea Kayaking, Sailing, Hiking, Rock Climbing, WFR, Leadership Workshop, and Canoeing
- Minimum Age: 18
- Average Age: 21
- Group Size: 15 Students/3-4 Instructors
- 135 Days In Length
- Average Pack Weight: 50 - 60 pounds
- Hiking Routes Approximately 50 - 100 miles
- Kayaking Routes of 100+ miles
- Mexican Cultural Interactions
- Student Expedition

Logistical Overview

The Sonoran Year is comprised of two distinct semesters: fall semester in the American Southwest and spring semester in Baja, Mexico. A holiday break of approximately one month separates the two semesters.

The fall semester will begin and end at the NOLS Southwest base outside Tucson, Arizona. All equipment issue and de-issue for the fall will take place at NOLS Southwest.

The spring semester will begin and end at the NOLS Mexico base near Mulegé, Baja California Sur, Mexico. All equipment issue and de-issue for the spring will take place at NOLS Mexico.

Please refer to the separate fall and spring *Equipment Lists* and *Travel and Logistics* documents for complete details.

The Expedition

The Sonoran Desert spans 120,000 square miles from the American Southwest all the way to the tip of Baja California, Mexico. Your course will be one of crossing borders, from the U.S. to Mexico and from the arid desert to the sea. This mixture of land and water means you'll sea kayak, sail, climb, and hike through the unique Sonoran eco-system, the most lush, diverse desert in North America. Due to the location of the Sonoran Desert, it has a range of biotic communities, including desert, temperate deciduous forest, coniferous forest, grassland and chaparral. In this land of contrasts, you'll gain extensive experience backpacking, rock climbing, sailing and sea kayaking. For a chance to see one of the world's most incredible ecosystems in all its diversity, this course has no equal.

Your course will spend 135 days exploring the startling beauty of the Sonoran Desert. This unique course is comprised of two semesters. The fall semester is spent at NOLS Southwest and the spring semester will be spent at NOLS Mexico. The first three weeks you'll explore the canyons and mountains of the Gila Wilderness in New Mexico. From there you'll travel to Cochise Stronghold to learn rock climbing in a base-camp setting. The third section of your semester is the Wilderness First Responder course. The fourth section is the canoeing section of your semester. After the canoeing section, your course will return to the NOLS Southwest facility for a two-day leadership workshop. This in-depth look at the NOLS leadership curriculum is designed to explore in greater detail the leadership skills you begin to hone in the southwest, help you craft your own leadership style, and prepare you further for what's to come in Mexico after the holiday break.



The spring semester is spent at NOLS Mexico. The first three weeks you will be sea kayaking the wild desert coastline of the Baja Peninsula. Your coastal exploration will continue on the sailing section where you will learn to sail in our 22-foot Drascombe Longboats. Then you will spend some quality time with local naturalists and fishermen observing endemic flora and fauna, global warming evidence in one of the lagoon areas on the west coast of Baja, and the migration of grey whales. The fourth section you will spend time in the Sierras of central Baja, a rural area rich with *ranchero* culture and unique practices of remote sustainable living. There may be opportunities to study the ancient cave art that still exists in the mountains of Baja. The successful completion of the Sonoran Year will culminate in an opportunity for you to apply all of your accumulated knowledge and skills to an autonomous student expedition through one of the spectacular middle mountain ranges of Baja.

The experiential education of a NOLS course emphasizes hands-on application of new skills and learning through personal experience whenever possible. Instructors change from section to section to give you the most highly qualified personnel for each skill area. You'll have one instructor, a "proctor," who will work the entire fall semester in the Southwest and another proctor who will be with you for the entire spring semester in Baja. Proctors provide excellent continuity to your NOLS experience.

Throughout the entire course, students will live outdoors and prepare their own meals. You are expected to take care of yourself and help take care of each other. The course will camp together, but will be divided into "tent groups" of 3-4 students each so that every student has ample opportunity to learn and practice camping and cooking skills in smaller groups. NOLS is a school and in addition to the practical experiential learning activities there will be formal sit-down classes presented during the day or in the evening.

Group dynamics and leadership are an integral part of our curriculum. You'll learn how to live and work closely with your course mates as you travel through remote areas. Your ability to respect your peers, work hard and tolerate uncertainty and adversity will be keys to your success. As your group gains leadership skills and experience working together, you can expect your instructors to turn over more responsibility for creating a successful expedition.

An emphasis of the Sonoran Year 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.

The First Few Days

The first two days of your year will be spent at the NOLS Southwest facility prepping for the fall semester. These prep days will be BUSY! On the first morning, you'll meet your instructors and course mates. After a course orientation, you'll spend the day issuing equipment, preparing food supplies and packing so you can head into the backcountry. You'll spend the first night camped at NOLS Southwest, and leave for the field the following morning.

Semester Section: Fall Semester In The Southwest

1) Gila Wilderness Hiking

The Gila Wilderness in New Mexico will be your home for the first month of the fall semester. Surrounded by rugged canyons, high mesa tops and vast stands of Ponderosa pine; you'll learn the basics of camping and traveling in the backcountry. As the section progresses, longer hiking days, off-trail travel, navigation and experimenting with the opportunity to lead your peers will challenge you. These challenges become rewarding as you learn the art of living comfortably in the wilderness. When you are not hiking, you'll spend time learning about the natural world, human history, astronomy, or backcountry baking. If you are lucky, perhaps you'll hear the bugle of an elk in the distance before going to bed.

The Gila Wilderness, the first federally designated wilderness area in the United States, is home to an unusual diversity of plants and animals that range from desert-adapted species to those more commonly found in northern latitudes. More recently, Mexican Grey Wolves have been reintroduced into the Gila. The human history of the Gila dates back thousands of years to the time when it was the home of the Mogollon civilization. Evidence of these prehistoric cultures can be found while



traveling through the area. The Gila also served as a refuge for Geronimo and his band of Apaches.

On this section, you may travel in student-led groups without instructors for a day at a time as you go 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 section may be held in other locations due to unforeseen circumstances.

2) Rock Climbing

You'll spend a little over two weeks climbing the granite domes of Cochise's Stronghold in Arizona's Dragoon Mountains. The hidden nooks of this rock fortress contain remnants from the Chiricahua Apache who once lived in this region. The area was named for the famed Chief Cochise who inhabited this area over 100 years ago. This beautiful remote climbing area provides excellent opportunity to cover a comprehensive climbing curriculum. The focus of the climbing section is to develop competent and confident climbers. You'll concentrate on a series of skills that begins with basic risk management, movement on rock, rope handling, and knot tying. The curriculum then progresses to belaying, top roping, rappelling, anchors, and protection placement. Each student has the opportunity to learn at his or her own speed. Your instructors will emphasize developing a competent, positive attitude toward climbing that will help you build upon your own natural abilities. If you are ready there may be opportunities to do a multi-pitch climb and/or practice lead climbing. NOLS has set standards by which we evaluate each student's readiness and ability before allowing them to lead climb.

This section may be held in other locations due to unforeseen circumstances.

3) Wilderness First Responder

- 80-hour course taught by staff of the Wilderness Medicine Institute of NOLS (WMI). Upon successful completion of practical and written exams, you'll receive a two-year WMI of NOLS WFR certification.
- The WFR is a required first aid credential for many outdoor programs, camps, schools and the NOLS Instructor course.

This is the standard course for outdoor professionals and provides you with the tools to make critical medical and evacuation decisions in remote locations. The busy course days will run from 8:00 am to 5:00 pm. Two evening sessions will be scheduled. You'll spend half of your time completing practical skills, case studies and scenarios designed to challenge your decision-making abilities. Scenarios and practice sessions will take place both inside and outside. This section is scheduled to take place at the NOLS Southwest facility, but may be held at another location due to unforeseen circumstances.

4) Canoe Expedition

The towering canyon walls of the Rio Grande River provide your introduction to canoeing skills and river travel. Traveling the river in canoes will give you an opportunity to experience wilderness travel on water. The river section launches from Big Bend National Park and the take-out is more than 100 miles and approximately two weeks downstream. This section of the Rio Grande flows in a gradual progression from flat water to occasional class II or III rapids. Depending on student abilities, some of these rapids will be run in canoes, while the more difficult stretches will be portaged. Portaging around rapids is a normal and useful canoeing skill. You should expect the vast majority of travel to be on flat water along this winding desert river.

This Chihuahua desert region is rich in both human and natural history. Land-based explorations of side canyons and the Chihuahua desert are integral elements of this section. Classes will include water risk management, river dynamics, scouting and river rescue.

Your fall semester sections may not necessarily take place in the sequence indicated above.

A holiday break of approximately one month will separate the fall and spring semesters. During this time students are independent and unsupervised by NOLS staff.



Semester Section: Spring Semester In Mexico

1) Sea Kayaking

Sea kayaks are wonderful watercraft from which to explore both marine and terrestrial environments. The coast you will be exploring is rugged, dry and mountainous—one of the driest parts of the Sonoran Desert ecosystem, with its own highly specialized and often unique plants and animals. The sea is rich with an abundance of plant and marine life. Between these two environments lies the miniature, animated world of the intertidal zone.

This is not always an easy environment to travel through. Rain is infrequent, but possible, in this part of Baja California. Windstorms are quite common, however, and they can make sea conditions hazardous and unpredictable, often for a few days at a time. During these periods we'll shift our attention landward and explore the coastal desert. Watching the weather, judging wind and wave conditions, and learning about the strength and ability of the group are what seamanship is all about. It is in these challenging conditions that students learn how to be competent and responsible sea kayakers.

Classes will include paddling technique, kayak rescues and navigation as well as natural history, skin diving, and possibly fishing.

2) Coastal Sailing

Once you've learned the fundamentals of sailing we'll explore the coast in yawl-rigged open boats called Drascombe Longboats. Each of these stable and seaworthy craft is able to carry five people and all their food and gear for more than a week. The emphasis of this section will be on coastal sailing and navigation skills, seamanship, leadership, and expeditionary skills.

On travel days we usually have classes in the morning and then sail for a few hours or the rest of the day, depending on the wind. Once we get to camp, we take care of the boats, review our day, have dinner and then either meet for a social evening or go to bed. On layover days we focus on day sails, classes or other land-based activities such as day hikes, diving or natural history. There will be an instructor on each boat to teach more about boat handling, navigation, anchoring and other nautical skills, but you will get your turn in each of the crew positions as it will be the students who do most of the sailing. This will be a chance to truly experiment with the things you've been taught. You'll have practice time to learn many more skills as you head down the Sea of Cortez, anchoring or beaching the boats each night and camping ashore. There may be days too windy for sailing and others when it may be necessary to row, but in general we find the longboats are ideally suited for Sea of Cortez conditions.

3) Baja Ecology and Whale-watching

In this section you will continue to focus on NOLS' core curriculum in a base camp setting while practicing scientific observation techniques on day-hikes with the guidance of local naturalists and fishermen. This section's curriculum will focus on endemic flora and fauna, global climate change evidence in the one of the Lagunas of the Pacific coast of Baja, and observation of migrating grey whales, as well as a strong introduction to land management and development issues in Baja. You will reinforce your LNT techniques and practices as they pertain to desert marine environments.

4) Cultural Hiking

This cultural backpacking section will take you to one of the mountain ranges of the central or southern Baja Peninsula. These mountains rise from sea level to nearly 6,000 feet and can offer views of the Sea of Cortez. Huge canyons cut into the backbone of these ranges, providing shade, water and spectacular relief. There can be some difficult navigation, however, a lot of your hiking will be done on-trail.

In the mountains, there are numerous small ranches tucked away far from roads. The rancheros that live there lead self-sufficient lifestyles: raising cattle and goats and tending to orchards. They have a lot to teach us about living close to the land. For this reason, we have chosen to send you into these magical mountains to gain real-life experiences and stories from the families. Groups camp near ranchos almost every night and spend a great deal of time socializing with rancheros and helping with rancho chores: milking goats, making tortillas and cheese, or observing leather making. Spanish language skills are a great asset on this section. You may also encounter cave paintings created by the people who lived here long before the peninsula



was explored and colonized by Jesuit missionaries in the 18th century. **Due to the preciousness of this mountain area you will be accompanied by local guides. These guides will walk with you everyday and will share with you the natural and human history of the area.**

5) Student Expedition

The Sonoran Year 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 (at least 4 students in each group). 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. 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. **Please note that the local guides will accompany each Student Expedition.**

Weather & Other Challenges

American Southwest

The American Southwest can be host to extremes in temperatures and weather conditions. Though warm mild weather is the norm, you should be ready to encounter harsher conditions. **Weather can change quickly in the Southwest, bringing rain, snow and wind.** Storms can last for several hours or several days. Temperatures during the day can range from the 30s to the high 90s. Nighttime temperatures can be as high as the 60s or bring subfreezing temperatures depending on the time of year and the elevation. Prolonged exposure from the sun can be a challenge as well.

The climbing and hiking areas we use contain rugged desert mountain ranges characterized by deeply incised canyons, steep slopes, rocky terrain and sheer cliffs. While in the backcountry, we will be far from roads and telephones. In the event of an accident or illness, it may take several days to get to a medical facility.

The Southwest is home to rattlesnakes and other potentially harmful insects and reptiles. Various species of cactus and other plants with sharp spines make it a challenge to avoid becoming a human pincushion. An important part of the curriculum is learning to identify these hazards to reduce the chance of injury.

Water is the life-blood of the desert. Hiking routes are often designed to go from water source to water source. These water sources are either man-made “tanks” or naturally occurring pools found deep in the clefts of the rocks. It can be many miles between water sources and it may be necessary to carry a day’s supply of water between camps. The Southwest has been experiencing drought conditions for the past few years. If water shortages dictate a change, the location might be moved to another wilderness area for the backcountry hiking portions of this course.

Identifying and managing the hazards of steep terrain, falling and rolling rocks, weather, animals, and spiny vegetation will be a constant theme in our instruction. The consistent practice of risk management techniques and assumption of responsibility for yourself and other group members will help make your expedition in these wild mountains healthy and enjoyable.

Baja California, Mexico

You'll find the Baja California peninsula to be a land of harsh beauty. The areas we visit are remote not because they are officially protected as wilderness, but because of the rugged and challenging nature of the land itself. Often we will be several days from medical facilities. The terrain can be mountainous and the hiking steep and demanding. At sea, strong winds may blow up suddenly making conditions hazardous for travel. Some of the desert dwellers, such as snakes and scorpions, are venomous and the plants defend themselves with thorns. The undersea world is surprisingly lush by comparison with the land, but there, too, are hazards that we must learn to identify and respect. Even the main highway is narrow, twisty, and used by some vehicles in poor condition and by drivers of widely varying levels of skill and judgment.

You will experience a wide range of temperatures on your semester. Rain is possible but not common. In the Sierra, the daytime temperatures could climb to over 100 degrees, and drop close to freezing at night. On the ocean sections, sea temperatures can range from the 70s to the low 60s. The sailboats can be wet and chilly particularly when heading into the wind.



We at NOLS do not venture out to prove our courage or to endure hardships needlessly; our goals are responsibility, education and enjoyment. These goals are achieved not by artificial means, but rather by our understanding and awareness of potential hazards. In a natural world without guardrails or warning labels, our health and well being lies in our knowledge and judgment, and a major goal of all our courses is to help develop these attributes in our students. The instructors will teach about scorpions, rattlesnakes, stingrays and many other potential hazards so that they may be avoided.

Physical Challenge and Fitness

Please read the page in your enrollment packet on physical conditioning. Physical challenge is not necessarily a goal for a NOLS course but they are physically demanding. Each section of your NOLS course will offer different levels and types of physical challenge. Students comment that the hiking section can be physically demanding because you are traveling through rugged terrain with heavy packs. During your climbing section, the physical challenge may come from learning rock climbing techniques, refining your balance and participating in long days of climbing. The sea kayaking section may challenge you by the necessity of carrying kayaks and water jugs up a steep beach, waking at 4 am to break camp, or a long day of paddling on the water. The simple day-to-day demands of outdoor living can be hard work as well. Part of teamwork involves taking everyone's physical abilities into account when planning a day's travel.

Your ability to participate and enjoy activities will depend on your physical condition. The better shape you are in the more you'll be able to enjoy and take advantage of all the opportunities that your course offers.

The Sonoran Year is long: 135 days. One of the greatest challenges of a NOLS course is not physical in nature. Students often comment that the hardest aspect of their course is living, working and learning with the same group of people for such a long time. You'll become very close to your fellow expedition members and perhaps some long lasting friendships will be formed. "Expedition Behavior," or the ability to get along with the other members of the group and function as a team is a vital component of the NOLS curriculum and the course experience. This aspect of the course will be a continuing theme throughout the year.

Fishing in Mexico

While not a focus of the course, students may have various opportunities to fish. There is no license required to fish from shore using a hand line or a rod and reel. If you are interested in either spear fishing or fishing from your boat or kayak, you will need to obtain a license, and should contact:

CONAPESCA/Oficina de Pesca
2550 Fifth Avenue #15, San Diego, CA 92103
(619) 233-4324 Fax: (619) 233-0344
www.conapescasandiego.org

Please bring a copy of your license with you to Mexico.

Course Objectives

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

Risk Management and Decision Making

NOLS teaches the wilderness user to practice responsible habits that promote the health and well being of self and others.

- Demonstrate knowledge of the hazards in the varied environments in which the course is conducted and be able to transfer and apply this experience to new environments
- Consistently recognize and minimize risk to self and others while traveling and camping.
- Understand emergency procedures and planning skills
- Demonstrate competent first aid skills
- Demonstrate sound judgment and decision-making



Leadership

Students are exposed to leadership theories and expected to participate in appropriate leadership roles to gain practical experience.

- Communicate clearly; actively listen; state personal opinions with clarity.
- Communicate timely, specific, descriptive feedback.
- Show initiative, assess and complete tasks.
- Assist in planning and participate in independent group travel
- Take responsibility for learning: set and attain personal goals; actively improve wilderness skill competence
- Demonstrate self-awareness: acknowledge ability, limitations, personal values and goals.
- Use appropriate decision-making styles as determined by the situation

Expedition Behavior

Expedition behavior involves teamwork, commitment to the group, acceptance of others, and cooperation to balance achievement of both individual and group goals.

- Support others in leadership positions
- Display a positive attitude under adverse conditions
- Influence the group in a positive way; support a positive learning environment
- Manage conflict appropriately
- Be punctual to meetings and activities

General Outdoor Skills

At NOLS, students learn to live and travel in the outdoors within a framework of personal health and care of the environment.

- Live proficiently in all course environments: learning to camp, cook and dress for a variety of conditions with an awareness of minimum impact concerns
- Travel competently in the course terrain using navigation, hazard evaluation and terrain specific travel techniques
- Take responsibility for the care and organization of personal and group equipment
- Exhibit good personal hygiene in diverse settings and situations

Environmental Studies

An integral part of every course is to raise students' awareness of their influence on ecosystems and their relationship with the world and others.

- Consistently demonstrate and understand sound Leave No Trace travel and living skills.
- Develop basic natural history observation; know characteristic flora and fauna for course areas
- Learn effective use of appropriate field references to facilitate self-teaching
- Increase familiarity with the geography of the American Southwest and Mexico
- Understand the history of and consider potential solutions to pertinent environmental issues
- Learn and apply fundamentals of basic field natural history including geology, ecology, ornithology, mammalogy, botany, meteorology and oceanography
- Understand the functions and local concerns of U.S. and Mexican land management agencies
- Understand local public policy issues (tourism, fishing, wolves, development, etc)
- Demonstrate basic knowledge and respect for local and regional cultures

