



LEAVE NO TRACE MASTER EDUCATOR™ COURSE

COURSE DESCRIPTION / TRAVEL INFORMATION / EQUIPMENT LIST

NOLS Southwest
Tucson, AZ
Saguaro National Park
February 25 to March 1, 2013

COURSE DESCRIPTION

During 5 days in this rich ecosystem, you will learn and teach the principles of Leave No Trace (LNT) and discuss wildland ethics. Your group will be a mixture of federal agency personnel, outdoor educators, guides and outfitters, outdoor retailers and private individuals. Courses are instructed by a NOLS Instructor/LNT Master Educator.

Hiking Route & Pack Weight

On this course you will be hiking in Saguaro National Park within the Rincon Mountains. Your route will cover approximately 20-miles, traveling mostly on established trails. There will be one layover day to maximize time spent in classes and having discussions. Due to the location of designated campsites and reliable water sources, the last travel day will cover 10.7-miles dropping 2,600-ft. to the trailhead. Pack weights should be approximately 35-45 pounds.

Weather

The Southwest can be host to extremes in temperature and weather conditions, even as the spring approaches. Though warm, mild weather is more typical, participants should expect anything from sunny days to monsoon rains, snow, wind and subfreezing temperatures. Temperatures can range from nighttime lows in the 30's to daytime highs in the 80's. Please be prepared with the appropriate personal gear and layers to accommodate this variety in conditions.

Curriculum

The Leave No Trace Center for Outdoor Ethics has designated NOLS as an educational provider of Master Educator Courses. NOLS brings over 40 years of experience teaching wilderness skills and leadership to the LNT Program.

Master Educator courses are informative, practical, hands-on and fun. You will learn skills and teaching techniques through lectures, skits and discussions in a spectacular outdoor setting. The course is designed for people who actively teach others outdoor skills or provide recreation information to the public and emphasizes three components:

- Low-impact camping skills
- Wildland ethics
- Outdoor teaching techniques

Teaching Session

Each participant will be required to present a short (15-20 minute) class on one of the LNT principles or how it relates to a specific activity, e.g., rock climbing or mountain biking. The class can be skills oriented or theoretical in content. Although some preparation time will be available once the course has begun, plan on having your class prepared before arriving at the course location. If you have questions regarding class presentations please refer to the teaching information on the LNT website <www.LNT.org> or contact the NOLS Leave No Trace office.

Environment

The Rincon Mountains are one of the unique desert mountain ranges called “sky islands,” a name that comes from the fact that these ranges are isolated pockets of alpine vegetation and lush forests surrounded by barren desert basins. While you are in Saguaro National Park in the Rincons you'll hike through a variety of biotic communities that include desert scrub, desert grassland, oak woodland, pine-oak woodland, pine forest and mixed conifer forest. You'll see towering saguaro cacti, ponderosa pines and hopefully some of the abundant wildlife like coyote, white tailed deer, the Mexican spotted owl and Gambel's quail. Even on trail, the terrain can at times be steep and rugged. In most areas of the Rincons, numerous species of sharp and spiny plants are common.

Food and Equipment

You will cook and sleep in smaller groups of 3 to 4 and be together as a single group for class presentations and discussions. Camping and cooking in small groups allows participants more opportunities to learn and practice Leave No Trace techniques.

Group equipment, such as stoves, shelters and cook gear, will be provided by NOLS. Please see the equipment section below for the full list of group equipment provided.

Personal clothing layers and gear can be brought from home or rented and/or purchased from NOLS Southwest. Please note that NOLS Southwest does not rent or sell hiking boots or camp shoes, but has most everything else for a backpacking expedition in stock. Please see the equipment section below for the full list of personal gear and clothing recommended for this trip at this time of year.

Food for the field portion of the course consists of typical NOLS bulk rations. This includes staple foods such as: rice, pasta, cheese, dried beans, dry cereals, nuts, dried fruits, granola bars and a variety of snack mixes. If you have special dietary needs or

more questions about the rations, please notify call NOLS Southwest directly at 520-749-0955 or email NOLS Southwest, Assistant Director Nick Cross at nick_cross@nols.edu.

Enrollment Forms

The following forms are available on the NOLS website (<http://www.nols.edu/Int/enroll.shtml>) and must be completed and received by the NOLS Leave No Trace office prior to the start of the course:

- Course Application
- Self-Screening medical form - **including cardiac screening section**
- Insurance Form - all course participants must have some form of medical insurance
- Acknowledgement of Risk and Release form

Payment and Cancellation Policies - PLEASE READ CAREFULLY!

Course tuition is **\$845** and includes a one-year individual membership to Leave No Trace, instruction, group equipment, meals and educational materials. Partial scholarships are available through the Leave No Trace Center for Outdoor Ethics and NOLS. For information regarding LNTCOE scholarships, please contact the Center for details at 800-332-4100. For information on the NOLS David E. Perkins Memorial Scholarship, please see the bottom of the enrollment page at the above link.

TO ENROLL, A COMPLETED APPLICATION AND A \$100 NON-REFUNDABLE APPLICATION FEE ARE REQUIRED.

THE BALANCE OF TUITION IS DUE 45 DAYS PRIOR TO THE COURSE START DATE.

IF YOU CANCEL YOUR ENROLLMENT ON A COURSE FOR ANY REASON, YOU WILL RECEIVE A REFUND ONLY AS SPECIFIED BELOW:

PRIOR TO 45 DAYS BEFORE THE COURSE STARTING DATE, NOLS WILL RETAIN THE \$100 APPLICATION FEE.

BETWEEN 30-44 DAYS PRIOR TO THE COURSE STARTING DATE, NOLS WILL RETAIN 25% OF THE COURSE TUITION.

BETWEEN 15-29 DAYS PRIOR TO THE COURSE STARTING DATE, NOLS WILL RETAIN 50% OF THE COURSE TUITION.

LESS THAN 15 DAYS PRIOR TO THE COURSE STARTING DATE, AND ONCE THE COURSE HAS BEGUN, THERE WILL BE NO REFUNDS.

If you transfer from one course to another:

- 45 or more days prior to the course starting date, there will be a \$25 processing fee

· 44 days or fewer prior to the course starting date,
regular cancellation policies will apply.

TENTATIVE COURSE AGENDA

DAY ONE

Course begins @ 7:00 am.
Orientation, gear check and pack-packing
Introduction to the Master Educator Course, history of LNT, role of research in LNT
Principles of Education
Principle One: Plan Ahead and Prepare

DAY TWO

Breakfast, pack and load vehicles.
Drive to Saguaro National Park and hike to first night's camp
- 8-miles with 2,000-ft. elevation gain
Principle Two: Travel and Camp on Durable Surfaces.
Principle Three: Dispose of Waste Properly.
Introduce "Action Plans".

DAY THREE

Breakfast
- Layover day with focus on classes and discussions
Principle Four: Leave What You Find
Principle Five: Minimize Campfire Impacts
Principle Six: Respect Wildlife
Work on "Action Plans".
Introduction to Trainer Course Material

DAY FOUR

Breakfast, break camp, pack up, and evaluate impact. Travel to second camp.
- Approximately 4.5-miles
Principle Seven: Be Considerate of Other Visitors.
Wildland Ethics
Share and discuss "Action Plans".

DAY FIVE

Breakfast, break camp, pack up, and evaluate impact.
- 10.7-miles, losing 2,000-ft. elevation
Course Evaluations.
Final thoughts.
Course pickup, drive back to Tucson, award diplomas, course ends at 4:30PM.

TRAVEL AND LOGISTICS

Start Time and Location

Your course will begin at the Comfort Suites hotel on February 25th, 2013. Your instructors will meet you in the lobby at 7am. After a brief hello they will transport you to the NOLS Southwest branch facility to begin the day's activities. Given the early start to the day we advise students to arrive in Tucson the night before the start date of their course.

Once at the NOLS facility, your group will get a course orientation and your instructors will check your personal gear. You will then have time to rent or purchase any additional gear from the NOLS Southwest outfitting store. Afterwards, you'll finish up packing your backpacks for the rest of the expedition. You'll have some introductory classes throughout the rest of that day. You will eat meals and camp at NOLS Southwest the first night. Your group will depart the NOLS facilities after breakfast on the second day and drive approximately 15-30 minutes to Saguaro National Park that morning.

The course ends on the afternoon of March 1st. To allow time for cleaning equipment, completing evaluations and awarding diplomas, plan to depart the NOLS facility no earlier than 4:30 p.m. If you plan on flying to Tucson, please schedule your departure flight for the day after the course ends.

Pre and Post Course Lodging

Special room rates have been arranged for NOLS students at the Comfort Suites. Please call the Comfort Suites directly for the latest NOLS price information. Tucson is a popular tourist destination and room availability may be limited. Please make room reservations as early as possible.

Comfort Suites at Sabino Canyon
7007 East Tanque Verde Road
Tucson, AZ 85715
(520) 298-2300 - you must mention NOLS to get discounted rates
www.choicehotels.com

The Comfort Suites is the closest hotel to the NOLS facility and has stores and restaurants conveniently located within walking distance. If you choose to stay some place other than the Comfort Suites, you must make arrangements to meet the NOLS representative in front of the Comfort Suites at 7am on February 25th. Look for the NOLS welcome sign in the lobby for any last minute instructions. We recommend that you contact other members of your course and make arrangements to share your hotel room to help reduce the cost. If you are interested in doing so, please contact the NOLS Leave No Trace office.

Accommodations are plentiful in Tucson with motels, bed and breakfasts, hostels and campgrounds. More information is available from <http://cms3.tucsonaz.gov/>. We encourage you to stay at the Comfort Suites if possible.

Camping Options:

Molino Basin Campground (USFS):

Location: Northeast of Tucson, between mile markers 5 and 6 on the Catalina Highway.

Access: Take the Catalina Highway off Tanque Verde Road in Tucson. Drive 4.2 miles to the Forest boundary and continue 5.7 miles to the campground. All campsites are adjacent to paved roads and are accessible by two-wheel drive low-clearance vehicles. Fees: \$10.00 per night per vehicle.

Gordon Hirabayashi Campground (USFS):

Location: Northeast of Tucson, just beyond mile marker 7 on the Catalina Highway. Take the Catalina Highway off Tanque Verde Road in Tucson. Drive 4.2 miles to the Forest boundary and continue approximately 7 miles to the campground. As you go up the mountain, the campground entrance is on your left. Fees: \$10.00 per night per vehicle.

Airport Shuttle

Arizona Stagecoach, (520) 889-1000, runs a commercial shuttle to anywhere in Tucson. Look for their information desk and vans at the baggage claim level of the airport. Contact the Stagecoach for information about rates: <http://www.azstagecoach.com>.

Discount Cab of Tucson is a “green” cab service that uses hybrid cars whenever possible. You can call them at (520) 388-9000 when you arrive at the airport and they will dispatch a cab as fast as possible. Check out <http://www.discountcab.com> for more information and rates.

Showers

Free showers and towels are available at NOLS Southwest.

Storage

You will be able to store vehicles and personal belongings not taken into the field at NOLS Southwest.

In Case of Emergency

Contact NOLS Southwest at 520-749-0955.

EQUIPMENT LIST

GROUP EQUIPMENT (provided by NOLS)

- Shelters (3-4 person backpacking tents (Please note: these do not have floors))
- Cook stoves and fuel
- Cook pots and frypans
- Cooking utensils
- Trowels
- Bulk water containers (dromedary bags)
- Water disinfection (NOLS uses Aqua Mira, which are chlorine dioxide treatment drops, if you prefer a water filter please bring your own)
- First aid kits
- Repair kits
- Maps & Compasses

- GPS units

PERSONAL EQUIPMENT (brought by participant or purchased/rented at NOLS)

You are welcome to bring any gear in this personal equipment list section that you already own. Please try to match your selections as closely as possible to the items described in the following list. Your instructors will inspect all of the gear you bring to determine if it is suitable for your course's specific route and anticipated weather. If an item is not approved, you can leave it with your luggage in the NOLS Southwest storage lockers. You may be required to rent or purchase gear from our outfitting department to supplement what you bring with you. **Your specific instructor team, recent weather and route will ultimately determine which gear is best for your expedition.**

You can pay for gear rentals or purchases from NOLS Southwest on-site after your course via cash, check or credit card. You may also request that NOLS send a bill to you in the mail after your course ends if you do not wish to pay in person.

UPPER BODY CLOTHING

☐ **2 - 3 insulating layers for the upper body** - These garments should fit comfortably over each other so they can be worn simultaneously. Cotton fabrics should be avoided since they have little insulation value when wet. Synthetic fabrics such as Patagonia Capilene® are preferred. We recommend one mid-weight top and one expedition-weight fleece or wool pullover top. *[NOLS Southwest has these items for purchase only]*

☐ **Fleece or “Puffy” Jacket** - Any jacket layer of 300-weight polar fleece or a down or synthetic puffy jacket. We recommend a puffy insulated jacket for this time of year. *[NOLS Southwest sells and rents insulated synthetic jackets].*

☐ **Synthetic T-shirt** - To wear on warm days. Lightweight polyester or Coolmax® is encouraged because it dries more quickly than cotton. *[NOLS Southwest has these items for purchase only]*

☐ **Wind Shirt** - A lightweight, breathable, nylon wind shirt, either pullover or full zip style. Must be large enough to fit over all of your insulating layers. Hooded wind jackets are strongly recommended. Does not need to be waterproof. *[NOLS Southwest sells and rents lightweight wind jackets]*

☐ **Rain Jacket** - A sturdy, roomy waterproof jacket with a hood. Both coated nylon and breathable fabrics such as Gore-Tex® are acceptable. Ponchos are unacceptable. *[NOLS Southwest has this item for purchase only]*

☐ **Sports Bra** – Females only. *[NOLS Southwest has this item for purchase only]*

LOWER-BODY CLOTHING

☐ **2 insulating layers for the lower body** - These need to fit comfortably over each other and underneath your wind or rain pants. We recommend bringing a light or medium-weight base bottom layer (long underwear bottoms) and either an expedition-weight bottom, fleece pants or puffy pants. *[NOLS Southwest has all these items for purchase and has fleece pants for rental]*

☐ **Rain pants or Wind pants** - These should be coated nylon wind pants or Gore-Tex, breathable rain pants. You should be able to wear these comfortably while hiking. *[NOLS Southwest has wind pants for rent or purchase, we do not carry rain pants]*

☐ **Shorts** - Lightweight nylon athletic shorts. These do not serve as an insulating layer. *[NOLS Southwest has this item for purchase only]*

☐ **Underwear** – Silk, synthetic or none. We recommend that men go without underwear, and just use nylon shorts with liners. Women should go with what's comfortable. *[NOLS Southwest has this item for purchase only]*

FOOTWEAR

☐ **Hiking Boots** - Lightweight lugged-sole hiking boots that provide sturdy ankle support. If you are used to hiking in trail runners that is also acceptable, as packs generally weigh 35-40 lbs. *[NOLS Southwest does not stock hiking boots or trail runners]*

☐ **Camp Shoes** - Lightweight running shoes *[NOLS Southwest does not stock camp shoes]*

☐ **2 – 3 pairs of Socks** - 75 to 100% wool, Merino wool, heavy rag type or synthetic/wool blends. Avoid cotton blends. *[NOLS Southwest has wool socks for purchase only]*

☐ **Gaiters** - Not required, but strongly recommended due to the sharp flora in the desert. Gaiters with double closure (i.e. both zippers and snaps) or 2" Velcro are recommended. *[NOLS Southwest has this item for purchase only]*

BACKPACKS/SLEEPING GEAR

☐ **Backpack** - Internal frame packs should have a volume of at least 5000 cubic inches. External frame packs should have a volume of at least 3500 cubic inches. *[NOLS Southwest has internal frame packs for rental]*

☐ **Sleeping Bag** - Down or synthetic bags with a minimum temperature rating of 0 - 15 degrees. *[NOLS Southwest has 15 degree down sleeping bags for purchase and 5 - 15 degree synthetic sleeping bags for rental]*

☐ **Sleeping Pad** - Thermarest® or closed-cell foam at least 3/8" thick. *[NOLS Southwest has foam pads for rental and Thermarest® pads for purchase]*

☐ **Sleeping Bag Stuffsack** - Compression stuff sacks are recommended for internal frame packs, and oversized stuff sacks are recommended for external frame packs. *[NOLS Southwest has this item for rental]*

MISCELLANEOUS CLOTHING

☐ **Sun/baseball hat** - *[NOLS Southwest has this item for purchase only]*

☐ **Fleece or Wool hat** - *[NOLS Southwest has this item for purchase only]*

☐ **Fleece or wool gloves** - *[NOLS Southwest has this item for purchase only]*

MISCELLANEOUS PERSONAL GEAR

☐ **Ground cloth** – The tents used for backpacking expeditions at NOLS do not have floors. Lightweight ground cloths work well to protect your sleeping system from dirt and water. *[NOLS Southwest has this item for rental only]*

☐ **Waterproof bag liners** - Plastic trash compactor bags are sturdy and work best. *[NOLS Southwest has this item for purchase only]*

☐ **Small stuff sacks** - Small nylon or mesh sacks with drawstrings for organizing items in your pack. *[NOLS Southwest has this item for rental or purchase]*

☐ **Personal Eating Utensils** - 1 each of a cup, bowl and spoon. *[NOLS Southwest has these items for purchase only]*

☐ **Disposable lighter** - *[NOLS Southwest has this item for purchase only]*

☐ **Water Bottle(s)** – You need to have at least 2 Liters of capacity. *[NOLS Southwest has water bottles and bladders for purchase only]*

☐ **Sunglasses** - *[NOLS Southwest has this item for purchase only]*

☐ **Lip Balm and Sunscreen** - *[NOLS Southwest has this item for purchase only]*

☐ **Toilet Articles** - Toothbrush, toothpaste, comb, brush, skin lotion, etc. *[NOLS Southwest has limited selection of these items for purchase only]*

☐ **Bandanna** - *[NOLS Southwest has this item for purchase only]*

☐ **Watch** - *[NOLS Southwest has this item for purchase only]*

☐ **Headlamp** - *[NOLS Southwest has this item for purchase only]*

☐ **Pocket Knife** – Optional. *[NOLS Southwest has this item for purchase only]*

☐ **Notebook and pen/pencil** - *[NOLS Southwest has these items for purchase only]*

If you have questions about gear selection for your course or are interested in the current weather conditions as your course nears, please call the NOLS Southwest office at 520-749-0955. Thanks!

CONTACT INFORMATION

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