

## BIO 415L - Field Studies in the Southwest (4 units)

More information and the application form are available on the web. Go to: <http://www.csupomona.edu/~djmoriarty/>  
In the left panel, click on the link that says Arizona Class.

<b>Organizational Meeting</b>	<b>Thursday, February 12, 2009</b>	<b>Noon</b>	<b>Bldg. 8 Room 5</b>
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### OVERVIEW

This course is a one-week field trip to the Chiricahua Mts. of southeastern Arizona. Although listed as a Spring Quarter class, the trip takes place during the break between Winter and Spring Quarters. The course content is: 1) an introduction to the field ecology of the area; and 2) field research projects involving species diversity and community organization. Students provide their own transportation and pay for their room and board at the course site (Southwestern Research Station). Four (4) units of credit are given, and the course is complete at the end of the trip, i.e. there are no papers, assignments, or meetings during Spring Quarter.

### LOGISTICS

The course begins Sunday morning at 8:00 am at the Arizona-Sonora Desert Museum near Tucson, Arizona. Students are advised to arrive in the Tucson area the previous night, but provide for their own lodging for that night. Sunday afternoon, we drive to the Southwestern Research Station located in the Chiricahua Mts. The Southwestern Research Station (SWRS) is maintained by the American Museum of Natural History. Accommodations are similar to a motel; students are housed 3-5 to a room with each room having its own bath facilities. Towels, bedding, and soap are provided. Meals are provided in a central cafeteria. Bring your own snack items, as the kitchen is closed between meals. Vegetarian diets can usually be accommodated.

### CLOTHING and EQUIPMENT

You will be required to turn in a field book (spiral bound; 8½ by 11 paper recommended). We will encounter a wide variety of climatic conditions ranging from warm and sunny to temperatures below freezing with snow, so be prepared. It may rain, so bring raingear. The Southwestern Research Station is at an altitude of 5400 feet, and it will be cold! Bring a flashlight, daypack, canteen (water bottle), binoculars, calculator and personal items. A lab book from your basic ecology class would be helpful. If you have a laptop computer, bring it for data analysis and to prepare PowerPoint presentations. Make sure you have StatCat on your laptop. A USB flash drive will come in handy. Statistics books are always useful. Field guides, especially birds and the woody plants are useful.

### PREREQUISITES

Preference is given to students who have taken both Ecology (BIO 325/L) and Biometrics (BIO 211/L). Other courses such as chaparral biology, ornithology, mammalogy, herpetology, plant taxonomy, and basic statistics (e.g. STA 120) are helpful. Students will be selected for the course on the basis of their background. You may be able to take the course if you haven't had Ecology, or Biometrics. Fill out an application and let the instructors decide. Feel free to discuss this with Dr. Moriarty.

### GRADES and GRADING

Grades will be based on your essay/field book and your performance in the field projects. Field project grades will be determined by your participation in the data gathering, analysis, presentation, and on a short abstract of your project, which you turn in the day after the project. The following percentages are used to determine final grades: Essay = 15%; Field Book = 10%; Wednesday project = 15%; Thursday project = 30%; Friday project = 30%.

### COSTS

Room and board for the week at Southwestern Research Station will cost about \$366. This will be paid at the Station (it will not be part of your fees or paid to Cal Poly). The station will accept cash, Visa, Mastercard, or Discover. The kitchen is closed between meals, so bring your own snack items. Remember that you are responsible for your own transportation, and for your lodging in Tucson the night before the class begins. There is also an admission fee for the Arizona-Sonora Desert Museum; this will be about \$12. You may want to have some cash to purchase incidentals at the small store in Portal (~5 miles from the Research Station), or for t-shirts and/or books sold at the Research Station. The Sonoran Desert Museum has a bookshop and gift shop.

### APPROXIMATE DRIVING DISTANCES (Miles)

	Cal Poly	Blythe	Phoenix	Tucson	SWRS
On Saturday (before class starts on Sunday), you'll drive to Tucson. On Sunday, you drive from Tucson to SWRS. Other distances are provided just for your information.		200	355	465	645
		Blythe	155	265	445
		Phoenix		110	290
		Tucson			180

## DIRECTIONS AND TIME SCHEDULE

Much of the driving is through very sparsely populated areas. It can be a long time and distance between roadside services such as gasoline and food. Watch your gas supply carefully. Make sure you have a spare tire and know how to change tires yourself, since cell phones may not work in some areas and you should not accept a ride to the nearest towing facility from a stranger.

**The course begins at 8:00 am on Sunday, March 22, 2009**, at the parking lot of the Arizona-Sonora Desert Museum. To reach the Museum from Cal Poly, take I-10 (San Bernardino Freeway) east to Tucson. At Tucson, exit I-10 at Prince Road, take the frontage road south for three miles to Speedway Blvd and turn right. (NOTE: this road is narrow and hilly with sharp curves - proceed slowly and with caution). After 12 miles, turn right onto Kinney Road. In about 2.5 miles, the Desert Museum will be on your left.

Motel reservations in Tucson (population ~500,000) are recommended - they tend to be busy at this time of year. The Metropolitan Tucson Convention and Visitors Bureau can be reached at 1-800-638-8350. If you belong to AAA (auto club), they will usually help with reservations. The AAA web site is: <http://www.aaa-calif.com/> The "Visit Tucson" web page is <http://www.visittucson.org/>. If you are considering camping out Saturday night, you might consider the Gilbert Ray Campground, which is located very near the museum. The campground fills fairly quickly at this time of year, and (unfortunately) they do not take reservations. You might want to try to get in early, and/or phone ahead to determine the situation at the campground. The phone number is: (520) 883-4200.

To reach the Southwestern Research Station from Tucson, return to I-10 and head east. Proceed to the second exit after the New Mexico border, which is Highway 80. This exit is called "Road Forks". Take 80 south about 28 miles to New Mexico Highway 533 which leads to Portal and the Southwestern Research Station. If you reach the very tiny town of Rodeo, NM, you have gone about 2 miles past Highway 533. Highway 533 is marked with a sign which indicates it leads to Portal and the Chiricahua National Monument. WARNING: You will encounter Highway 80 in Arizona, but do NOT get on 80 here. It leads to Tombstone and eventually the Mexican border. Do not exit I-10 until you have crossed into New Mexico.

Turn west onto Highway 533 and proceed to the Research Station. There are many turnoffs and forks, most of which are poorly marked. Check your map carefully - you should be able to check your progress by watching for turnoffs to the various campgrounds. You should pass entrances to Idlewild, Stewart, and Southfork campgrounds. The last campground you pass is Sunny Flats. From the Sunny Flats campground to the Research Station, the driving distance is 1.8 miles. The distance from Highway 80 to the Station is about 12 miles. The road is narrow, has many curves and some potholes. Most of the road has been recently paved, but a few short sections are not well maintained. Proceed slowly and cautiously.

The course ends Friday night March 27, 2009. Your station fee includes Friday night, as well as breakfast the next day.

## ADDRESS AND PHONE OF Southwestern Research Station

The address is: Southwestern Research Station, Portal, AZ 85632. The phone is: 520-558-2396. People should attempt to call you at this number only in the case of emergencies. If you want to chat with someone, there are pay phones at the station which you should use to call them. Your cell phone will not have service at the station.

## COOPERATION

During the week in Arizona you will be very busy. There are class activities all day and most evenings, leaving little free time (you do earn your four units). You are also under pressure to do a large amount of work in a short amount of time. In order for the class to operate smoothly, it is necessary for everyone to follow directions and cooperate. If people wander off, the whole class must stop and wait. We have enjoyed excellent cooperation in the past, and expect it to continue. **If you sign up for the course but cannot attend at the last minute, please let us know. Call the cell phone of one of the instructors.** At least send word with someone who is going, so we are not left standing around the museum parking lot waiting for you.

## INSURANCE

In the event of an injury resulting from an accident during a field trip, the student's personal health care plan provides for *primary* medical coverage payment. If the student's health care benefits are exhausted, the CSU Student Travel Accident Insurance helps pay for additional related injury expenses. Enrolled students without a private health plan may seek medical attention from the campus Student Health Services. Please note that the CSU Student Travel Insurance policy **covers accidental injury only**. The policy **DOES NOT** provide coverage for any illness or disease unless an accident is the direct cause of the illness. NOTE: **All students will be required to sign the Academic Field Trip Waiver of Liability and Hold Harmless Agreement** (available from Dr. Moriarty).

## TIME CHANGE

Beginning in 2007, Daylight Saving Time will begin on the second Sunday of March. This is before the trip. Since Arizona does not go on Daylight Saving Time, Arizona time and California time will be the same during the trip. There will be no time difference between California and Arizona during the trip.

## QUESTIONS?

Dr. Moriarty ([djmoriarty@csupomona.edu](mailto:djmoriarty@csupomona.edu); 8-15; 869-4055) or Dr. Quinn ([rdquinn@csupomona.edu](mailto:rdquinn@csupomona.edu); 4-2-438; 869-4056).  
<http://www.csupomona.edu/~djmoriarty/> Click the [Arizona Class](#) link.