

NRM 2203 Introduction to Field studies  
Summer II 2015

Instructor:

Bonnie Warnock  
Office: 111A RAS  
Phone: 837-8488  
email: bwarnock@sulross.edu  
Office Hours: By appointment

Course description:

An introduction to science in the field. This course will cover topics including field safety, first aid, basics of camping and hiking, keeping a field journal, and use of field equipment such as a compass and GPS. The course will also introduce students to basic field science topics, e.g. wildlife identification, plant identification, geology etc.

Class meetings:

July 27<sup>th</sup> – 31<sup>st</sup>

Tentative Course Outline and Schedule (Topics and times may change):

Day	Location	Topic
Monday	Alpine 8:00-3:00	Sign in and general orientation; field safety and first aid; using a compass and GPS; how to observe and record observations in a field notebook; hiking basics on Hancock Hill ( <b>Dr. Chris Estep, SRSU; Dr. Bonnie Warnock, SRSU; Mr. Chris Jackson, SRSU</b> )
Monday	Travel 3:00-6:00	On the road to Big Bend Ranch State Park
Monday	BBRSP 6:00-8:00	Supper and First Aid and Desert Safety ( <b>Ranger David Dotter, TPWD</b> )
Monday	BBRSP 8:00-11:00	Entomology ( <b>Dr. Chris Ritzi, SRSU</b> )
Tuesday	BBRSP 7:00-5:00	Hiking, Soils ( <b>Dr. Lynn Loomis, NRCS, tentative</b> ), Geology ( <b>Dr. Kevin Urbanczyk, SRSU</b> ), Vegetation ( <b>Dr. Bonnie Warnock</b> ), Herpetology ( <b>Mr. John Karges, The Nature Conservancy</b> ), and more map reading and compass and GPS skills
Tuesday	BBRSP 7:00-11:00	Night hiking and more herpetology ( <b>Mr. John Karges</b> )
Wednesday	BBRSP Dawn – 10:00	Birds ( <b>Mr. &amp; Mrs. Chris Pipes</b> )
Wednesday	Travel 10:00-3:00	Head to Big Bend via the River Road; Hydrology, Geology, and river issues on the way ( <b>Dr. Kevin Urbanczyk</b> )

Wednesday	BBNP 3:00-9:00	Set up camp in BBNP; camp cooking for supper; hike the window trail
Wednesday	BBNP 9:00-11:00	Astronomy ( <b>Mr. Alfred Alaniz, San Antonio College, tentative</b> )
Thursday	BBNP 7:00-2:00	Hike the Lost Mine trail...Use the field skills you have acquired to take notes and observe ( <b>Dr. Bonnie Warnock, Mr. Joe Sirotnak, NPS</b> )
Thursday	BBNP 2:00-5:00	<b>Archeology or Paleontology (TBA)</b>
Thursday	BBNP 6:00-9:00	Camp cooking and rest night
Friday	BBNP 8:00-2:00	Get your hands dirty on a volunteer park project and experience service learning ( <b>Mr. David Larson, NPS</b> )
Friday	BBNP 2:00-5:00	Break camp and wrap up; head back to Alpine

Required Text:

None

Learning objectives

1. Students will be able to conduct themselves safely in the field.
2. Students will be able to collect data in the field about abiotic and biotic factors
3. Students will be able to apply skills to other aspects of field science.

Class Organization:

1. You must participate on the field trip, and this is 60% of your grade. Each person is expected to contribute to discussions and data collection. You will lose points for unsafe activities, complaining, hanging back and not participating etc. This is not just a camping trip! You need to participate at each field site. I also expect everyone to pitch in on camp work. This should be a fun and safe learning experience and everyone on the trip has the responsibility for helping with this endeavor.
2. We will be gone for 5 days and 4 nights and will not be returning to Alpine during that time. We will be camping and not staying in hotels or eating at restaurants. Showers will be limited and accommodations may be a little rough at times. Please be aware of this. Making everyone on the trip miserable because you can't rough it will result in a poor participation grade.
3. It is Sul Ross State University Policy to provide reasonable accommodation to students with disabilities. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility. If you have any health problems or dietary restrictions or allergies you will need to let me know on the first day at the general orientation and prior to leaving Alpine.
4. You will be required to keep a field notebook throughout the trip. This will constitute 30% of your grade. The notebook will be digital and will be kept on an App on the supplied iPad mini.

You will be turning it in at the end of the class, so keep it professional! At each stop and each activity you will need to record scientific data, observations, and your thoughts. There will be time each day to catch up on your notebook but you should have it with you at all times and record information in the field. Please incorporate pictures into your field journal as well.

5. There will be skills challenges during the class. These will require you to apply a skill that you have learned and will be 10% of your grade. Examples include: navigating to a point with a GPS, finding a certain type of track or plant etc.

**6. Important note: No alcohol, illegal drugs or firearms are allowed on this trip and violation of this policy will result in a failing grade for the course and ejection from the class. If you are ejected after we have left SRSU, you will be responsible for arranging your transportation back to Alpine.**

Grades:

Skills Challenges:	10 points
Field Notebook:	30 points
Participation on trip:	60 points

Grade assignment:

<60 = F; 60-69 = D; 70-79 = C; 80-89 = B; 90-100 = A

**Program Learning Outcomes for the B.S. in Natural Resource Management**

The graduating student will demonstrate that he/she is able to:

1. Identify species of wildland plants and wildlife common to the western United States and describe their natural history.
2. Demonstrate knowledge of the elements of an ecosystem.
3. Communicate about natural resources and conservation both verbally and in writing.
4. Conduct range and wildlife inventories in a team setting.
5. Apply knowledge about elements of an ecosystem into an appropriate conservation management plan.

To bring:

Based on space considerations during our group travel, limit what you bring to (1) your bedroll (sleeping bag & pillow), (2) one bag with your clothing and other personal effects, and (3) a daypack-sized backpack for carrying food, water, and other necessities for a day in the field. For the night that we camp at Big Bend National Park, tents and all cooking equipment will be provided.

Bedroll. Sleeping bag. Pillow and some kind of pad to put beneath your sleeping bag, such as a Paco pad, are recommended.

Clothing.

- Hat sufficient to keep to keep your head, face, and neck shaded from long-term sun.
- Sturdy shoes, tennis shoes at a minimum. Hiking boots are recommended, but not brand new ones. Breaking in new hiking boots in the conditions under which we'll be operating can be miserable. Open-toed footwear such as sandals or flip-flops when we are in the field are prohibited.
- Shoes for the volunteer day suitable for walking in deep mud. Should be lace up so that they won't slip off of your feet and something that you don't mind getting muddy. Cheap tennis shoes for example.
- Long pants and lightweight long-sleeved shirts. In many of the areas in which we will be working, there is little shade and most of the vegetation has thorns or spines. Occasionally, we may encounter biting flies or mosquitoes. Long pants and lightweight long-sleeved shirts are recommended to keep the sun, spines, and bugs from making you uncomfortable.
- Gloves, for handling rocks, spiny plants, herps, etc. are recommended.
- Cool weather garment. You probably won't need it, but a sweat shirt, sweater or light jacket might be a good idea in case we encounter a particularly cool evening. (We will have an outdoor activity most evenings.)
- Rain gear. It's as unlikely that you'll need a rain jacket/pants or rain poncho, but bring it if you have it. One of those lightweight cheap disposable rain ponchos is probably sufficient.
- Leisure wear. Flip-flops, shorts, etc. are fine for wear at the end of the day, but keep in mind that we will start early and finish late with an activity every night so there won't be much free time.

Personal toiletries. We will have access to showers during much of the trip, but for at least part of the trip (Wednesday afternoon through Friday morning at Big Bend National Park), we will not, so configure your personal toiletries with this in mind.

Extra set of prescription eyeglasses or contacts. Sunglasses.

Extra cash for drinks and snacks outside of meal times. Opportunities to go into stores will be very limited, but we may stop somewhere during travel and there are stores with limited items available during the day at Big Bend Ranch State Park and Big Bend National Park.

Cell phone. You can bring it, but be aware that there is no cell phone service within Big Bend Ranch State Park or Big Bend National Park. For the most part, you will not have cell service Monday afternoon through Friday morning.

Coffee/tea cup or other beverage container.

Additional to bring for carry in the field in your daypack, which should have enough room for the below and a lunch:

Prescription medications. Also, over-the-counter medications that you feel you may need and have taken before such as for allergies and mild pain (aspirin, ibuprofen, etc.). (We will be a long way from any store that carries these items.)

Very basic first aid items, such as Band-Aids and Neosporin antibiotic cream for cuts and scrapes. Epinephrine auto-injector, if applicable.

Sun screen.

Bug spray.

Headlamp or flashlight & extra batteries. Headlamp instead of flashlight is strongly recommended. Ideally, you should be able to have one that only emits red light so as not to ruin your night vision once your eyes have adjusted when we are working in the field after dark. Some headlamps/flashlights come with a red lens. Otherwise, you can often use a rubber band to affix a piece of red wax paper over the end. For moving about in camp, normal light emission is fine.

Pocket knife.

Water bottles, canteen, etc. sufficient to carry at least 2 liters/quarts.

Camera.

Pen & pencil.

Colored pencils for the map exercises.