

**GENERAL INFORMATION**  
**Big Bend Spring Field Trip, 2010**  
**51-360, section 001, 2 credits**

Trip Leader: Tim Paulsen  
Office: H-306  
Office Telephone: 424-7002  
email: paulsen@uwosh.edu

Pre-Trip: Class is scheduled for 4:10 p.m. Wednesdays, beginning February 3. Attendance is required. During this time members of the class will prepare poster presentations on some aspect of the geology of Big Bend National Park. Each student will lead a field trip stop using his or her poster. Topics will be assigned in the first class.

Wednesday, February 3: Course overview, course schedule, slides of Big Bend, and logistics (enrollment and fee payment deadlines, hand out hold harmless agreement forms, solicit drivers and fill out and collect driver authorization forms, class permission forms, hand out listing of potential topics for presentations).

Wednesday, February 10: Regional Geology of US Overview, poster instructions/elements  
**Clearance slips due**

Wednesday, February 17: Students work on poster presentations

Wednesday, February 24: Students work on poster presentations  
**Van certification completed**

Wednesday, March 3: Students work on poster presentations

Wednesday, March 10: **Posters due**, organizational meeting, cook/clean group assignments, menu hand out phone contact sheets

Wednesday, March 17: Shopping and pack food for trip; final organization.

Grading: Grades will be based on my evaluation of your posters and presentations in the field in Texas, field books, and work and participation on the trip. A general schedule follows.

Transportation: By University vehicles, in caravan.

Itinerary (somewhat tentative):

Friday, March 19	Leave Oshkosh, from Harrington Hall, at 6 a.m. Drive to AR
Saturday, March 20	AR to Fort Stockton, TX
Sunday, March 21	Geology of the Marathon Mountains.
Monday, March 22	Persimmon Gap, Park Hdqtrs, and Basin cmpgrd in Chisos Mountains
Tuesday, March 23	Chisos Mountains
Wednesday, March 24	Study Butte, Santa Elena Canyon, Terlingua, TX areas
Thursday, March 25	Boquillas Canyon area
Friday, March 26	TBD; Depart Big Bend
March 27	AR(?) to (?)
March 28	(?) to Oshkosh

Big Bend Park Headquarter's phone is 915-477-2251 --emergencies only.

Cost (estimated):

My best estimate for the cost of the trip at this time is \$550.00. This is a "fixed" cost in that it includes items that should be the same for everyone (mileage and camping fees, but not food). The principal variable is the number of people who will be going. Should actual expenses be less than this you will get a refund when we get back; if they are greater (I don't expect they will be) I will have to bill you.

Food:

You are responsible for food costs on the trip. Costs will depend on how you feed yourselves. We will divide into cook groups. I expect that we should eat fast food for meals on the way down and back. This will keep our road time down each day. A rough estimate of possible food costs is provided below. Food costs can be reduced by spending less than I have indicated and by bringing your own food so as to avoid restaurant meals. We will discuss this more in class.

Restaurant Meals (12 @ \$10 each)	\$120
Self-cooked meals (\$12/day for 5 days)	\$60
	<hr/>
	\$184

Other Expenses:

These are largely up to you. Big Bend National Park sells a number of good publications on geology, birds, mammals, snakes, etc.

Payment:

Payments should be made at the Cashier's Office in Dempsey; you should indicate that they are to be deposited in the "Geology Spring Field Trip -Paulsen" account. The account number is: **355**. GET TWO RECEIPTS; one for yourself and another for ME. Give me the receipt as soon as you have paid (put it in my mailbox in an envelope if I am not around). Checks should be made out to the University of Wisconsin Oshkosh.

Equipment:

Clothing: Days will probably be warm (average March temperature is 74), and nights could be cool (average March minimum temperature is 45) . March is a low rainfall month with average precipitation 0.18 inches in the Big Bend. You should plan to protect yourself from the sun and the vegetation with long sleeves, long pants, and a decent hat. Desert sun can do you in faster than you might normally expect. Sunglasses are a must for the bright desert.

Gloves may be handy, perhaps in climbing, perhaps to keep your hands warm at night, perhaps to ward off spines.

Sturdy leather boots are necessary. Tie-ons are better than slip-ons, high tops better than low cuts because of spiny plants. You should bring two pairs of footwear, whether 2 pair of boots or 1 boots, 1 shoes.

Bring a bathing suit --we may have a chance to swim in the Rio Grande.

Try to get by with as little extra clothing as possible because we may have space problems in the vehicles. That being said, be sure to be prepared for cool nights while camping in the Chisos Mountains and for rain on the way to TX, particularly in AR.

Personal  
Items:

The usual soap, etc., but you also might want chapstick, aspirin, toilet paper, hand lotion, alka seltzer, sunglasses, sunburn lotion, towel, washcloth, and hand lotion. You may want a tweezers to pick out plant stickers.

Ipod/MP3: Bring one if you want to listen to music, but do not bring external speakers (i.e., don't assume others want to listen to the music; bring earphones).

#### Field

Equipment: Canteens or plastic bottles --enough for about 2-3 liters of water (2-3 canteens are fine), notebook and pencil, rock hammer (although it can't be used in the Park), hand lens, and a day pack. Optional, but worthwhile are camera and binoculars.

#### Camping

Equipment: Everyone should bring a sleeping bag, sleeping pad, silverware, cup, and plate/bowl. A flashlight is very useful; you might want to share one with a friend. The remainder of the equipment will be arranged with the whole group and includes: tents, camp stoves, coolers, cooking kits (including pots, can opener, sharp knife, spatula, iron frying pan, plastic dishpan, etc.), and gas lantern.

Food: While en route we will stop at restaurants for some meals (this is to be discussed). You may spend what you wish. I would recommend that you pack a large lunch before leaving --that should get you through a few lunches and save you some money.

While camping we will do our own cooking. We will form one food group. We should have two 2-burner gas camp stove, one cook kit, and two coolers. Two gas lanterns (e.g. Coleman) would be nice. Students will be responsible for making sure all of the equipment works before we leave. I would suggest that we bring an extra generator for both the stove and lanterns and, especially, extra mantles for the lanterns.

We will be dividing into two cook groups, each group is responsible for planning the menu for the class for 3 days (breakfast, lunch, and dinner), before departure and purchasing the necessary groceries. Each group will be in charge of preparing and cooking the meals it has planned. The group not cooking on any given day will be responsible for clean up of gear once everybody has eaten. *Everybody is expected to help with the work.* We will probably not have access to a grocery store while in the park. We might have a brief grocery stop in Texas on the way down to get things that don't keep well like meat, milk, bread, etc. However, I can't guarantee this, so we should be self sufficient when we leave Oshkosh. Food will have to be packed carefully to save space and avoid spilling. Use boxes, not bags, and your cooler.

#### A list of equipment

tent (find someone to share with if you don't have one; space will be limited)  
sleeping bag (don't share bags)  
pad or air mattress (required for warmth at night; you will not sleep well otherwise)  
day pack/backpack (no external frame backpacks)  
water bottle(s) for 2-3 liters  
waterproof bag for clothes  
misc. raincoat, hat or umbrella  
sturdy shoes or hiking boots  
comfortable clothing (t-shirts, sweatshirts, jeans)  
long underwear is imperative!  
warm coat (Chisos Mountains and AR may be cold?)  
high neck sweater  
wool socks (Chisos Mountains and AR may be cold?)  
gloves  
underwear (optional)  
towel, wash cloth, soap (we'll camp at a KOA on our first night in AR and for one night on our way back to WI; there won't be showers near our camp site in Big Bend, but you never know if we'll pass by some)  
flashlight with new batteries

knife, fork, spoon  
plastic plate, plastic bowl, plastic mug, silverware  
camera  
toiletries  
prescription medicines and ibuprofen/pain relievers  
field notebook & pencil (no spirals please)  
cash (junkfood, etc)  
hand lens/10 power mag  
pocket knife

A GOOD ATTITUDE IS REQUIRED! We will be in some amazing landscapes with fantastic geology, so this trip will be both fun and educational for all.

Health:

General: If you take any special medicine, bring it along. You are urged to have complete medical and dental checkups before the class. Minor complaints may be amplified under the stresses of heat, altitude, and hard work at in the field; they should be taken care of in advance. You should have shots for tetanus if not currently protected. No special immunizations are required, but I feel it's always good to be immune to tetanus.

**YOU ARE RESPONSIBLE FOR ALL MEDICAL EXPENSES WHILE IN THE CLASS. (THE UNIVERSITY AND THE FACULTY HAVE NO RESPONSIBILITY FOR MEDICAL EXPENSES OF THE STUDENTS NOR MEDICAL INSURANCE FOR STUDENTS.)**

Sunburn &

Heat Disorders:

This is a common and very unnecessary field ailment. Sunstroke can occur as well. People who do not usually burn are more apt to get caught because they do not take precautions. Wear hat, pants, and light shirt to keep cool and prevent sunburn.

Heat exhaustion, heat cramps, heatstroke, and heat rash are disorders which, in terms of their effect on the patient, range from annoying to fatal. We can avoid incidence of the first three by taking the following precautions:

1) Ignore whatever tales you may have heard about the desirability of water rationing. You cannot "train" your body to need less water by depriving it. There is no advantage to drinking only at certain specified times. The best policy is to drink lots of water. Drink before you leave camp in the morning. Drink lots of water when you are in camp at night. Drink all you can reasonably carry with you during the day. Carry no less than two quarts with you.

2) Follow the advice regarding clothing already given you. The principle you want to keep in mind is that your body should be shaded, but with permeable material through which air can pass easily. Light cotton is good; lightweight, tightly woven polyester not so good.

If you begin to feel dizzy or your skin begins to feel cold and damp or you feel mild muscular cramps or nausea or sudden unusual headache, stop exercising and notify the trip leader.

## Dangerous Plants

& Animals: Scorpions, tarantulas, black widows, and brown recluses are all present. The likelihood of you being bitten is remote, unless you dig under rocks, logs, tree bark, etc. with your hands.

Rattlesnakes (4 species) and copperheads are present, but seldom out during the day. You probably won't see any snakes, but you should observe the following ordinary precautions:

1. Avoid walking around in the desert at night. Use a flashlight while walking after dark.
2. Make sure you can see where you step or put your hand before you make your move –in general, keep your eyes open a bit more than you might otherwise.
3. While walking, skirt around possible "hiding places" for snakes.

They are usually timid, avoid people and rarely bite. If you should be bitten, make sure the snake was a rattler before doing anything. If it was a rattlesnake, do the following:

1. Slow down circulation; be as inactive as possible. If possible, don't run or walk far, and have someone assist you to a van. Allow the wound to bleed freely.
2. Have someone get you to a doctor as soon as possible. Make sure the doctor checks for reaction to horse-serum, if necessary.

If you are simply reasonable about it, you shouldn't have any trouble. There are no poisonous lizards in the Park.

Most desert plants have some way of stabbing you. In some it is an obvious large needle; in others it is tiny little pricklers that come off and irritate for days. The best advice is to stay away from them. Dr. McKee (an emeritus professor in our department) has a grading system based on a daily count of puncture wounds.

0-1 = good

2-3 = passing

4-8 = failure

> 8 = subject to ridicule and definite candidate for the Gruber Award

## Climbing:

Much of the rock in Big Bend is unstable and not recommended for climbing. We will, in general, not attempt steep climbs. If we do climb steeper slopes, be careful about dislodging rocks that may fall on someone below you. If you think the pace of the climb is too much for you, don't push it --stop and rest a while because we won't be in any great hurry.

## REMINDERS

- 1) Any student who violates the field-trip rules will be expelled from the trip and will have to find their own transportation back to the university. Other university discipline may be employed if necessary.
- 2) No illegal substances may be brought on the trip or used during the trip. Checkpoints operated by U.S. Customs and Border Protection are located on the highways that we will be taking to and from the Big Bend area. Bring your driver license. If you are detained, you will have to find your own way home.
- 3) There is to be no unauthorized or unnecessary use of university vehicles. Drivers must obey all traffic laws during the trip.
- 4) No noise or ruckus is allowed in camp after 10:00 pm or at whatever time the field-trip leader designates. The car radios should not be used to play music in the campgrounds.
- 5) Student drivers must check with the field-trip leader to obtain route directions before leaving any stop.
- 6) Students must not deface outcrops. Samples should not be collected without permission.
- 5) Eye protection must be used whenever hammering.

- 6) There should be no horsing around in the vicinity of dangerous locations. Students should wear appropriate footgear and should not run or jump in boulder fields or near steep slopes.
- 7) Students are not required to do any activity that they are not comfortable doing, consider to be unsafe, or consider to be a health threat.
- 8) Students must inform the field-trip leader of any health problems that may restrict activities during the trip.
- 9) Please do not bring hard-back suitcases or rigid framed backpacks, as they are difficult to load in the vehicles. Please pack light; remember we will only be gone for spring break.
- 11) The use of hammers is discouraged, in order to protect our outcrops. It is banned while in the parks
- 12) We will be visiting a National Park and private land from which it is ILLEGAL to take rocks and fossils. Please do not steal rocks or fossils from these places. I will turn in violators and dismiss them from the class without refund.
- 13) Any requests or complaints regarding the campgrounds will be made to me and not to the management.
- 14) Smoking will be allowed in the campgrounds or parking lots where the park says you can smoke. There will be no smoking during the field day when hiking or doing roadside geology. Smoking will not be permitted in vans. Do not throw cigarettes or matches out of any vehicle window!
- 15) Lunch bags, orange peels, wrappings, cigarette butts and the rest of your trash are to be packed out of the field and vans for proper disposal. Vans are to be cleared of trash every day!

## Participants

### Geology Spring Field Trip

#### Big Bend National Park

2010

Akin, Sara J.  
 Colburn, Kyle R  
 Ernst, Bryan R  
 Felda, Garrett R.  
 Hobbs, Eric L.  
 Jeffrey, Sarah R.  
 McCarthy, Jonathon J.  
 Mills, David C.  
 Ness, Taylor J.

Paulsen, Tim (faculty)  
 Ragonese, Phillip J.  
 Richter, Paula D.  
 Rogers, Christopher J.  
 Roti Roti, Joseph M.  
 Suszek, Tom (faculty)  
 Thao, Ser  
 Wheiland, Peter A.  
 Zink, Rebecca L.

**ACTIVITY OR FIELD TRIP WAIVER**

**Agreement for Assumption of Risk, Indemnification, Release, and Consent for Emergency Treatment**

I, \_\_\_\_\_ (print name), age \_\_\_\_\_, desire to participate voluntarily in Geology 360 (Spring Field Trip/Big Bend National Park, Texas) sponsored by the University of Wisconsin – Oshkosh.

I UNDERSTAND THAT I AM BEING ASKED TO READ EACH OF THE FOLLOWING PARAGRAPHS CAREFULLY. I UNDERSTAND THAT IF I WISH TO DISCUSS ANY OF THE TERMS CONTAINED IN THIS AGREEMENT, I MAY CONTACT DR. TIMOTHY PAULSEN, AT TELEPHONE NUMBER 920-424-7002.

**Assumption of Risks:**

I understand that Geology 360, by its very nature, carries with it certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries and/or illness. I am aware of the risks of participation, which include, but are not limited to, minor injury, such as bruises, contusions, broken bones, concussion, and catastrophic injuries, such as paralysis and even death. I understand that UW-Oshkosh has advised me to seek the advice of my physician before participating in the above-listed activity. I acknowledge that I have been advised to have health and accident insurance in effect and that no such coverage is provided for me by UW-Oshkosh, the Board of Regents of the University of Wisconsin System, or the State of Wisconsin (collectively, the "Releasees"). **I know, understand, and appreciate the risks that are inherent in the above-listed activity. I hereby assert that my participation is voluntary and that I knowingly assume all such risks.**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature of Parent or Guardian**  
**(If Participant is under 18):** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Hold Harmless, Indemnity and Release:**

In consideration of my participation in these activities, I, for myself, spouse, heirs, personal representatives, estate or assigns, agree to defend, hold harmless, indemnify and release the Releasees and their officers, employees, agents, and volunteers from and against any and all claims, demands, actions, or causes of action of any sort on account of damage to personal property, personal injury, or death which may result from my participation in the above-listed activity. This release includes claims based on the negligence of the Releasees, and their officers, employees, agents, and volunteers, but expressly does not include claims based on their intentional misconduct or recklessness. **I understand that by agreeing to this clause I am releasing claims and giving up substantial rights, including my right to sue.**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature of Parent or Guardian**  
**(If Participant is under 18):** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Consent for Emergency Treatment:**

I authorize UW-OSHKOSH and its designated representatives to consent, on my behalf, to any emergency medical/hospital care or treatment to be rendered upon the advice of any licensed physician. I agree to be responsible for all necessary charges incurred by any hospitalization or treatment rendered pursuant to this authorization.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature of Parent or Guardian**  
**(If Participant is under 18):** \_\_\_\_\_ **Date:** \_\_\_\_\_