

To: Students planning to enroll in GEOS 3300 (Field Geology I) in Summer, 2015

From: John Geissman, Professor and Department Head, Geosciences

This communication will hopefully answer MANY of your questions about plans for GEOS 3300.0S1 (Field Geology I) for Summer, 2015 (which is not too far away!)

DATES FOR GEOS 3300.0S1: We are planning at least two introductory meetings for the class; the first will be in mid-April and the second will be later in April or very early May, before finals time. At this point, please plan for a very early morning departure from the UTD campus on Sunday, 17 May; heading west to central New Mexico and then southern Colorado. The course will end no later than 11:59:59 pm on Saturday, June 6, 2015, when you return to UTD to watch summer temperatures climb above 110F, day in and day out. Departure will be from south-central Colorado, the site of our last field project. During this 21 day time period, please understand that you are to make essentially **no daytime commitments**. The tentative schedule is as follows:

- Project 1: San Ysidro area, May 18-20, camped in Jemez Mountains. Map compilation, report preparation on May 21.
- Project 2: Baca Canyon, May 22-25, camping out. Map Compilation, report preparation May 26.
- Project 3 and 4: Huerfano Park area, Southern Colorado; Departure on May 27; end date of June 6. Camping out. Third project due on June 2; final project due on Friday, by 7:00 pm, June 5.

You will have very limited time "off" during this period.

PERSONAL GEAR: Please be well-prepared for any kind of weather and plan for extreme variations. The time interval that this course has been taught over has gone from hot (104°) to cold (snow, hail, sleet, wind, rain) over the period of a week! This summer, however, we expect that the temperature will be 78° every day, with a few clouds in the sky, clearing by early evening, with no more than 5 percent humidity (yeah, right). In other words, be prepared for anything.

[An additional word about clothing and footwear. Please keep in mind that the mornings and evenings may get pretty cool. Dress in layers, so you are prepared for daytime temperatures in the 90's. I suggest loose-fitting, light colored clothing. Go to Goodwill and get some light colored long and short sleeve cotton shirts! Cotton is by far and away the best fabric for the field. Keep in mind that you are going to lather on a LOT of sunscreen in three weeks. Wear a tshirt under a normal shirt...if it starts to get really warm, take the normal shirt off, take your tshirt off, and put the normal light cotton shirt back on (duh). Loose fitting light colored pants are also very, very comfortable in hot weather. Re boots....best thing is to wear two pairs of socks! Go to REI (or equivalent) and get a bunch of liner socks; they are pretty cheap; then a pair of light wool socks on top. If you want to avoid blisters, this is the best way to do it, in my opinion! And speaking of boots, keep in mind that you are going to be walking on quite a range of ground surfaces. The last thing you want is a sprained or broken ankle—both have happened during this field course!]

Field Geology I is unlike any course that you have taken in your life. **It is a quasi strenuous experience, in that you will be doing a lot of hiking, at high elevations, in generally warm/hot and dry conditions.** Dehydration in the high desert and mountains can be a serious problem. Please have **at least** four (4) liter size, sturdy water bottles. Most projects will be in warm to hot, DRY places at variable elevations. There is no running water in the mapping areas. That said,

ALL surface water in the western US is contaminated with giardia lamblia, a flagellated protozoan parasite that does really, really nasty things to you if ingested. In other words, you cannot drink the water.

PERSONAL VEHICLES: You are not are allowed to take personal vehicles in Field Geology I.

MEALS: The course fee that you have paid for Field Geology I includes costs for food. The instructors, with your assistance, **will be responsible** for the purchasing of food, but we wish to make certain that any and all dietary restrictions/issues are sufficiently taken care of and respected. To try to keep things as convenient and as enjoyable as possible, we strongly suggest that you group up for evening meals (say three or four students in a group) and that you form "cooperatives" so that everyone plays a role in cooking and cleaning up! This is a point that cannot be overestimated. Everyone will be involved in helping to prepare dinners and clean up at night and in the morning. In terms of breakfast and lunches, an array of foods will be available for the entire group for making breakfast and lunches. We will provide propane stoves, some lanterns, water containers, and some coolers. In addition, we will provide the essential pots and pans and cooking implements. You are **REQUIRED** to bring your own personal eating implements (plate, bowl, cups, spoons, knives, forks) to last through the duration of the class (no disposable plates/ silverware!). If you wish to bring your stove, your cooler, your own lantern, please, please do so!

ALCOHOL: All of you are aware of the legal drinking age, simple as that. The consumption of alcohol in any of the vehicles used in the course is absolutely forbidden. Alcoholic beverages taken on camping trips **MUST** be kept in coolers or other enclosed spaces at all times while vehicles are being packed and while vehicles are moving to a final destination. In addition, alcoholic beverages are **NOT** encouraged in "public" spaces, such as group cooking areas and in group working areas. In other words, consumption of such beverages should be restricted to small groups relaxing around individual tents, etc. More on this issue during our pre course meetings. (Understand that Field Geology I is a test of your performance **IN THE FIELD**; we do not want you waking up some/most/all mornings feeling awful/blurred/etc., as the instructors will not be sympathetic and will not have enough good coffee to take care of such ills.)

DRUGS AND MEDICATIONS: The possession/ use of illegal drugs on a UTD field trip is forbidden by law. We must know of any illnesses or physical concerns each student may have and the medications each student may be taking and for what reason.

GUNS : **Do not bring firearms of ANY kind.** Immediate dismissal from, and/or failure of the field course is the likely result. Charlton Heston is **NOT** a friend of mine.

ELECTRICAL: We will have at least one high-efficiency electrical generator for the Baca Canyon and Huerfano projects. This means that you are welcome to bring laptop computers, etc. Cell phone coverage at both of the camping areas is quite good. Other items like blenders, coffee makers, portable Jacuzzis, TVs and satellite dishes, etc. are of course very strongly frowned upon.

INSURANCE: You must be covered by some form of accident and injury insurance before you will be allowed to participate in these field courses. Prior to Sunday, May 18th, you will be requested to fill out a UTD/State of Texas insurance form, and, if necessary, we will provide insurance for the duration of each course. Your own personal insurance should cover you on these courses (you need to provide the name of the insurance company and the policy number).

INSTRUCTORS: John Geissman (geissman@utdallas.edu, x2545) is the principal instructor for Field Geology I. Mr. Jacob Jackson and Mr. Warren Lieu will likely be two of the Graduate Student Teaching Assistants and they will be serving as additional instructors and **they will be responsible for many aspects of the logistics** of the course. In principle, we will have two additional graduate student teaching assistants.

EQUIPMENT AND SUPPLIES, Field Geology I

(suggested items in *italics*) (items available for sale, from John Geissman in red)

Your Responsibility (field gear):

- ✓ adhesive tape
- ✓ *belt pouch (for notebook, pencils, pens, etc.) (or equivalent, such as a field vest)*
- ✓ calculator, pocket
- ✓ color pencils
- ✓ *erasers (thousands)*
- ✓ *field (map) case (12" x 12")*
- ✓ hammer (geologists)
- ✓ *hand lens*
- ✓ paper, lined
- ✓ paper, scratch
- ✓ *pencils, 2H to 6H*
- ✓ *pencil sharpeners*
- ✓ *protractor/ruler combination (6", clear, get at least three)*
- ✓ triangle, drawing
- ✓ *field notebooks (at least two)*

Personal (field-related) (BE PREPARED FOR COLD, HOT, WET, AND/OR DRY CONDITIONS, AS CLIMATE CHANGE HAS ALWAYS BEEN HAPPENING, JUST NOW THERE IS AN ANTHROPOGENIC COMONENT):

- ✓ water bottles (at least **four** one-quart **sturdy** containers)
- ✓ first aid kit (small, personal)
- ✓ flashlight (late nights in the field, protection from the TA's)
- ✓ hat, handkerchief, gloves, etc.
- ✓ insect repellent
- ✓ pocket knife
- ✓ rain gear (light weight and very waterproof)
- ✓ sturdy knapsack, with a moderate to heavy internal frame(capable of holding raingear, a gallon of water, neat rocks, extra pair of socks, sunscreen, LUNCH, personal first-aid kit, etc., ipod with numerous Grateful Dead performances)
- ✓ sunscreen (lots and waterproof)
- ✓ sturdy, broken-in boots (not sandals, although sandals are OK for end of day—watch for cacti)
- ✓ sunglasses
- ✓ watch
- ✓ books (non-geologic in nature for late-night reading--Jack Kerouac, Wallace Stegner, Edward Abbey, latest Grateful Dead Almanac, etc.)
- ✓ poly-pro long underwear
- ✓ tent, sleeping bag, foam pad
- ✓ frisbee, h-sack, football, etc.....
- ✓ personal eating gear (plate, bowl, cup, extra bowl, glass, couple sets of utensils)
- ✓ **IMPORTANT:** some form of sturdy, plastic container (Tupperware?) to pack your lunch in so it is not deformed in your day pack!

Provided:

- ✓ first aid kit (large)
- ✓ aerial photographs (if necessary)
- ✓ Brunton compass (but, if you can bring one, please do so!!!!)
- ✓ Readings for each mapping project
- ✓ hydrochloric acid
- ✓ map giving location of each mapping project, in case of emergencies
- ✓ mylar for map overlays
- ✓ topographic maps
- ✓ cross section paper
- ✓ stereographic nets and tracing paper
- ✓ GPS, for some projects

Optional:

- ✓ *ink pens (waterproof) (e.g. "rapidograph" type[e.g., Rotring] as well as fine soft-tip). Several points of different widths, starting with a 00 point and going up to a 3.0. Field Geology I, you are **not required** to ink final products.*
- ✓ *Laptop computer*