

About this guide:

This guide provides some basic information that is useful for all sections of field camp. Depending on the field camp section(s) in which you participate, some material may not be relevant.

Geology field camp is your opportunity to develop the skills of observation and interpretation while learning the technical aspects of field work.

Instructors:

Coastal:

Dr. Ping Wang

Hydro camp:

Dr. Mark Rains

Dr. Kai Rains

Geologic Mapping:

Dr. Tom Juster

Dr. Paul Wetmore

Geophysics:

Dr. Sarah Kruse

Dr. Jochen Braunmiller

Judy McIlrath

Course expectations:

For the duration of this course, you are expected to participate in all projects and give each assignment your utmost effort.

Health issues:

You MUST fill out a confidential health form, which will only be opened if you are unconscious. It will be returned to you, unopened, at the end of class, if we have not had to use it. Prior to the start of any session, inform the professors (in private) of any health issues of which they should be aware (diabetes, allergies, etc.)

Camp Behavior:

For the next several weeks, you will be living closely with your fellow students and instructors. You must treat all members of field camp with the respect and consideration they desire. Recreation is encouraged, but must be conducted safely and with thoughtfulness for others. This can

be a very enjoyable time if everyone follows some simple guidelines:

- No use of firearms
- No sleeping in vehicles
- Alcohol is not sanctioned at field camp
- 10 PM - 6 AM noise curfew on overnight stays
- No seconds on meals until everyone has been served
- No motel room parties
- Maintain clean camps/rooms/vehicles
- No harming or harassing wildlife or livestock

Field Behavior:

While in the field, you are expected to work in a professional manner. We will generally start work at 8 AM and end at different times depending on location, weather and other variables. While you are encouraged to work on your projects in the evenings, we cannot allow you to continue collecting data after dinner for safety reasons. Adhere to the following guidelines:

- Work with your assigned partner. Do Not Hike Alone
- Work diligently but be mindful of safety.
- Treat public and private property with respect.
- Do not litter in the field. (No orange or banana peels, cigarette butts, or toilet paper)
- Work independently when required.
- No earbuds or headphones while hiking

Field Preparation:

You are REQUIRED to carry at least 2 liters of water in the field. Every field day bring water, lunch and field gear inside the vehicle with you. Do not expect to stop at a store unless you are told that we will be stopping.

Removal from Field Camp:

There has never been a case of expulsion from USF Field Camp. DON'T be the first!

Causes for expulsion include, but are not limited to:

- Use of illegal substances or hard liquor, drunkenness
- Reckless use of vehicles (including driving under the influence of alcohol)
- Endangerment of self, other students or instructors
- Harassment of other students or instructors
- Refusal to comply with rules or participate in projects
- Continually uncooperative or dangerous behavior

Cell Phones:

Some of our camp sites/activities will be outside of cell phone service. There could be stretches of time as long as 3 days or more when you will not be able to make cell phone calls. Cell phones may be charged from vehicles while the vehicles are being driven; there will be periods of time when your cell phone is dead and cannot be charged.

Safety:

Your safety during field camp working hours and recreational time is your own responsibility!

There are inherent risks in being in the field. The first priority of field camp is that everyone returns home safely. Do not engage in any activities that endanger yourself or others. Rock climbing, bouldering, and boulder rolling are never permitted. Never climb any cliff or mountain that makes you uncomfortable. Never try to swim with the alligators or play in rip currents! Don't be that guy!

Alcohol is not allowed in any vehicle, and drivers of the vehicles are not to be under the influence of alcohol or drugs. If you feel the driver of your vehicle is driving dangerously, tell the field Instructor immediately.

If you are in any situation that puts your safety at risk or you perceive may put your safety at risk, remove yourself from that situation immediately and inform an instructor.

Terrain:

You may be in a variety of terrains. Wear the appropriate footwear. In most cases, open toe shoes are NOT allowed. Wear hiking boots that provide good ankle support. In some cases, steel-toed shoes cannot be worn; check with the instructor. Use extreme caution when climbing slopes where others may be below you. Loose rocks moving downslope can be deadly.

Lightning- is a very real danger. At the first sign of lightning, quickly get down from any ridge or mountain and away from water. Even if you do not see flashes, you are in striking range if you can hear thunder. Return to the vehicles and get inside with the windows closed. Do not touch the frame or lean against the vehicle. If there is no shelter, crouch in the open (to avoid direct strikes) twice as far from the tallest tree; as it can fall (to avoid ground strikes). You can also crouch in a grove of small trees. Move away from a group of people and drop your pack and hammer. An enclosed vehicle is safer than an open picnic shelter.

Snakes/biting insects: These are always a risk in the outdoors. We suggest you wear long pants tucked into your shoes and use insect repellent.

Ticks may be common in some of the areas we visit. You should check for ticks every evening, paying special attention to the backs of your knees, groin and torso. If you are bitten by a tick, use tweezers to grasp the tick by the head as close to your skin as possible. Do not squeeze the body! Pull

straight out until the tick loosens and comes free; this may take several seconds. If pieces of the tick's mouth remain, pull them out separately. Smash the tick in a tissue; do not use your bare hands. Wash the bite site thoroughly with soap and water and thoroughly wash your hands.

Ticks transmit infection only after biting, and the risk of acquiring Lyme disease is only 1.2-1.4 percent in areas where Lyme disease is common (the northeastern US). The risk of Lyme disease in the Rocky Mountains is even lower. Here there is a risk of Colorado tick fever, which most often goes away on its own and is not dangerous, though complications can occur.

If you have been bitten by a tick, watch the bite site for infection (reddishness around the bite), for fever-like symptoms 3-6 days after the bite (Colorado tick fever) or a circular rash between 1 and 4 weeks after the bite and flu-like symptoms (Lyme disease). In each case, medical help is recommended.

West Nile Virus -exists in the Rocky Mountains. It is contracted through mosquito bites, and can be prevented by wearing mosquito repellent. The incubation period for the virus is 3-14 days. According to the CDC, people over 50 are at greatest risk for severe reactions. When someone is infected with West Nile virus they will typically have one of three outcomes: No symptoms (80% of people), West Nile Fever (about 20%) or severe West Nile disease, (less than 1%). If you develop a high fever with severe headache, consult your doctor.

Bears- inhabit many of the areas where we will be working. The chances of meeting bears are extremely low, largely because of bears' disinterest in people. All bears are potentially dangerous; they are unpredictable and able to inflict serious injury. NEVER feed or approach a bear (or any other wild animal!). Do not cook or eat

in or near your tent or get food odors on your sleeping bag. Do not keep food, toothpaste, sunscreen, beer, and other smelly items in your tent. Sleep in different clothing than you wear for cooking and eating. Use a flashlight at night to warn bears away.

Mountain lions- Chances of an encounter with a mountain lion are small, but some precautions should be taken. Stay with your partners and make noise as you hike; this will prevent encounters. If you see a mountain lion, do not squat down or bend over (you resemble prey), and do not turn your back (running triggers the instinct to chase). Face the lion and look as large as possible, flap your jacket, shout, throw rocks, and back away slowly.

Dehydration and heat illness- The sun is very strong both in Florida and at high elevations. You should wear sunscreen, light colored shirts that cover your shoulders, and a hat. Drink plenty of water. In dry climates, you (who live in humid Florida) may not be aware of how much fluid you have lost to sweat. If you are experiencing headaches, you are probably not drinking enough water. If you experience weakness, dizziness, muscle cramps, nausea, rapid pulse, profuse sweating or clammy skin, very high body temperature, and/or disorientation, you may have heat illness of varying severity. At the first sign of these symptoms, rest in a shady area (if possible), drink water, and loosen your gear and clothing. You may need to send your field partner for help.

Hypothermia- is caused by exposure to cold, aggravated by wet, wind, and exhaustion. It is the number one killer of outdoor recreationalists. The moment your body begins to lose heat faster than it produces it, you are undergoing exposure. Persistent or violent shivering is a clear warning that you are on the verge of hypothermia. Symptoms may also include

vague, slow, slurred speech; memory lapses or incoherence; immobile, fumbling hands; frequent stumbling; drowsiness; or apparent exhaustion.

To prevent hypothermia:

- 1) Stay dry
- 2) Wear wool, not cotton
- 3) Be aware of the wind
- 4) Understand cold (most hypothermia cases develop in 40-50 degrees, dangerous temperatures if you are wet or exhausted)
- 5) Avoid alcohol on cold nights
- 6) Sleep inside a tent

Driving

University regulations require that all travel for courses is in university vehicles. You cannot drive your own vehicle. Drivers of university vehicles must operate the vehicles cautiously and safely at all times. Only USF employees may drive a university or rental vehicle.

Physical/Dietary Requirements

Please inform the Instructors of any physical requirements, or risks related to any physical or dietary needs or requirements you may have. If you have dietary requirements, you must tell the instructors as soon as possible. We will do our best to accommodate your needs. Unless you inform us of your needs, meals are not planned for vegetarians or other special diets. Inform us of your needs when you register for the class; before we travel.

Teaching Equipment

Some of the gear/equipment that you will use in the field is extremely expensive (\$10,000-\$50,000 and up). Some is irreplaceable! Some is borrowed from local companies and must be returned in the condition we received it. Be EXTREMELY careful when using any of the equipment!

A Brunton Compass is required for Geologic mapping and one will be assigned

to you for the class. You must return it at the end of the course, or you will be charged the following amount. Report any damage incurred in the field immediately. Accidents happen, and we will do our best to correct any problems with the instruments at no cost to you. Deliberate misuse or abuse will not be tolerated and you will be responsible for repairs or replacements due to these.

Brunton Compass \$400

Payment of Fees

Activity fees will be charged to your account during the semester. At times, the Geology Alumni Society is able to provide some funds to offset these fees. These funds may not be available before all fees are due to the University. Don't count on those funds, and be appreciative if they come your way!

Academic dishonesty

Academic dishonesty is not tolerated, and there is a well-defined university procedure to judge such cases. Students who obtain work from previous field camp students will be dismissed from the course with a grade of F.