

Planning Guide & Packing List



General:


A little planning will go a long way to making this a meaningful and pleasurable trip.

WHAT YOUR \$550.- TRIP FEE WILL COVER

- | | |
|--|---|
| <input type="checkbox"/> Reading Material (e.g. Textbooks) | <input type="checkbox"/> All lodging / camping in multiple person tent |
| <input type="checkbox"/> Field Notebooks | <input type="checkbox"/> All entry fees to parks, monuments, museums, etc. |
| <input type="checkbox"/> All Transportation from Denver | <input type="checkbox"/> Administrative fees for instructors in accordance with University Policy |
| <input type="checkbox"/> All food (Breakfast, Lunch, Dinner) | |

THINGS YOU MUST BRING (for either of the two field courses)

FOR CAMPING

- Sleeping bag and insulating ground pad
- Pillows and blankets if needed
- Mess Kit (Knife, For Spoon, Plate, Cup)
- Sewing kit
- Personal Hygiene Items
- Towels
- Wet Wipes
- Hand Lotion
- Insect Repellent
- Small First Aid Kit (Band-aids, etc.)
- Pocket Knife / Utility Knife
- Tweezers (for cactus needles)
- Flashlight
- Lighter(s)
- Swim trunks / Bathing suits
- TOILET PAPER
- Rope/nylon string
-  Prescription Medication

FOR HIKING / DAY TRIPS

- Daypack
- Water Canteen / Bottle
- Good hiking boots (broken in)! Do not try to break in during field course.
- Several pairs of GOOD hiking socks
- Rain coat or poncho (small roll-up to carry in backpack)
- Broad-brimmed sun hat. You are often in full sun.
- Beanie hat. High elevations or nights may get sensitively cold, even in Summer.
- Sunscreen, sunblock (40+).
- Sun glasses.
- Gloves, for handling rough rocks and against cold.
- Drinking Water. PLENTY!
- First aid kit, especially band-aids. Blister tape comes in handy. Moleskin.
- Snacks / Trail Mix (provided; don't forget to pack)
- Safety pins
- Hiking Poles (optional)

SOME GENERAL ADVICE (for either of the two field courses)

Clothing: Be prepared for both cold and hot weather conditions. Shorts and T-shirts make good hiking clothes when the weather is hot. Wool is recommended for cold conditions. And bring a raincoat! Also, remember layering!!!

Footwear: You should bring some comfortable, broken in hiking boots and high quality socks. Do NOT try to break in new boots during the Plateau Trip. We have doctored up many vicious blisters from students who tried. Sometimes the blister culprit is low quality socks. Wool and cotton are the preferred materials. Just in case, bring some blister tape for your feet.

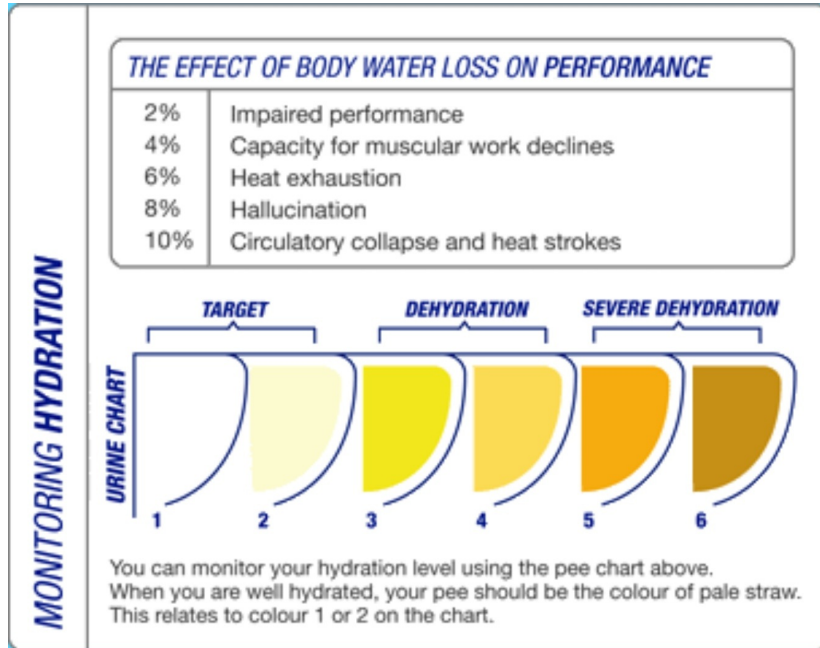
Food: While the trip provides food and sack lunches, you may want to bring additional snacks, such as granola or trail mix, if you like. Snacks are provided and ready for the taking in the morning. Just don't forget to bring them. Bring extra drink, if desired, but leave alcoholic beverages at home. A canteen to carry water is essential.

Facilities: We are often far away from facilities and students might need to relieve themselves in the countryside. For this purpose it might be wise to carry some toilet paper and disinfectant gel or wipes with you. Please make sure that any waste is properly buried. In case we are at a camp site without facilities, the EAS department has purchased some privacy tents. We might ask some students for help in setting up these portable latrines in an appropriate manner.

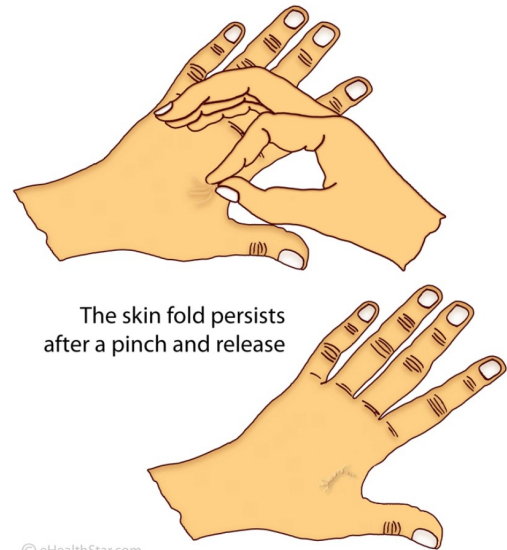
Buddy System: Yes, you never outgrow this common sense admonition. If you want to go exploring, please take someone with you for longer excursions or let somebody know where you are planning to go and when you intend to be back.

Water: Remember you will be hiking in a desert. You should be prepared to carry **TWICE** as much water as you think you will need. We strongly suggest that you carry at least a gallon when we are on long hikes. Dehydration can kill you. Swelling fingers and headaches are good indications of dehydration. Adding an electrolyte (Gatorade, mineral water) to tap water will quench your thirst during desert hikes much better than just plain water. You may also use salt tablets when hiking as well as snack/protein bars.

For effective external cooling try a spray bottle to wet yourself down. On the market are now combination drinking bottles with a sprayer unit. Those might not be a bad investment when hiking in desert climates.



Skin Turgor Test



You can estimate your hydration level according to the Skin Turgor Test or the Urine Color Chart.

Turgor Test: A pinched skin fold should subside instantaneously if you are well hydrated. If the pinched skin stays distorted you will need to drink some water.

Urine Test: When you relieve yourself, look at the color of your urine. It should be as light in color as possible, maximal a light straw yellow color. Any darker color means dehydration. Rule of thumb: The darker your urine color, the more dehydrated you are. Very dark urine color is cause for concern. Drink water immediately. Also, don't try to play macho and be shy to ask some else for water. It can happen and we are happy to share.

Heatstroke: This is relatively common when someone becomes dehydrated. It often starts very innocently with feeling of a dry mouth and sometimes having a nose bleed. The next phase are headaches which can start out mild and a beginning of swelling of the tongue and/or muscle cramps. A Turgor Test at this time will be incredibly positive.

As a remedy, drink a lot. You may also want to use a spray bottle to wet yourself down. Make sure you wear a hat which is absolutely essential. If you have an onset of heatstroke, drink and rest in the shade!

Campfires: In some places we will be allowed to have campfires. It is imperative that campfire rules are followed. Unless some of you planning to have a fire-watch on duty through the night all fires must be **COMPLETELY** extinguished by the time the last one of the group turns in. That means using water to douse the fire multiple times, stirring the coals / remains occasionally in the process to assure that the fire is completely extinguished.

The responsibility to extinguish fires rests with those that will go to bed last. **DO NOT USE SAND** to try to extinguish a fire before you turn in for the night. **IT MUST BE WATER!!!**

THINGS YOU MUST BRING (for either of the two field courses)

GEOLOGY TOOLS (GENERAL)

- Rock Hammer
- Sampling Bags (Ziplock™). Heavy duty preferred (get the thickest ones you can) or better yet, cloth bags!
- Small index cards to place with sample into ziplock
- FIELD NOTEBOOK: high quality, water-resistant paper, waterproof covers, 4 1/2" × 7 1/4", grid / graph. (provided)
- Wide rubber band to hold field notebook closed.
- Pencils (mechanical) & Colored Pencils
- Rock / Mineral Analysis Testing kit which includes:
 - Acid Bottle
 - Handlens
 - Streak Plate(s)
 - Hardness Testing
 - Magnet
 - Rapid Density Tester (Penscale)
 - Water for analysis & density tester
- Backpack to carry it all (Well, duh!)
- Camera (*optional*)
- Chisel (*optional*)
- Brunton w/ inclinometer (*optional*)
- Map &/or GPS (*optional*)
- Goldpan (*optional*)
- Metal detector (*really optional*)

Optional, not required, but will come in really handy

- Pocket microscope
- Water bottle (for analysis)
- Chemical ID Kit (Micro torch, various acids, glass slides, etc.)
- Lighter
- Chisel
- Magnets (Keep those far away from your Brunton™, especially during measurements)
- Calculator (Scientific, but cheap)
- Few strips of colored vinyl or colored electricians tape for marking
- If time & circumstances permit, Dr. K may teach some panning and prospecting skills to those who would like to bring a goldpan.

GEOLOGY TOOLS GEL2530 - FIELD METHODS SPECIFIC

- Carrying Case / Backpack dedicated to field materials. May also hold personal items (Lunch, water, etc.)
- Brunton™ Compass (can be checked out from the department)
- Sharpie™
- Short Ruler
- Protractor
- Ruler (6 in)
- Small Tape measure (~2m length)
- Light colored measuring rope ~1/4" (~50m⁺)
Either purchase professional made "Surveyor's Rope" (\$26/50m) <http://www.professionalequipment.com/> or make yourself
- Clipboard with cover (9"+ wide, suitable for maps / airphotos)
Regular clipboards are too narrow to hold standard 9" × 9" aerial photos. Either purchase or make your own. Purchase example: <http://www.amazon.com/Clipboard-Cover-Profile-Spring-205103-BL/dp/B007AG7VO0> (\$14.25).
- A few small sample bottles for small specimens
- Pocket knife (Swiss Army style)
- Toilet paper or paper towels (to wrap specimens) ...and possibly other important business ☺

