

## Colorado State University Geology Field Course for Summer 2010

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- Faculty:** Bill Sanford, Jerry Magloughlin, John Ridley, Sven Egenhoff, Kaleb Scarberry
- Dates:** May 26<sup>th</sup> - June 29<sup>th</sup>, 2010
- Prerequisites:** required: G344, G364, G372, G376; recommended: G454, G366
- Materials:** Recommended reference texts: Class texts in each of the required courses as listed above; field and camping equipment (see attached equipment list)

### Summary:

The Colorado State University Geology Field Course (G436) emphasizes a rigorous approach to geological field studies, with a strong concentration on geological mapping. The course is taught throughout Colorado and New Mexico. The course is divided into modules taught by specialists in these areas. Each module will include a final report that will be prepared in the field.

### Logistics:

- You have to sign a liability form and hand it in to Bill prior to the departure.
- Students are responsible for buying and preparing their own food and camping equipment. Form cooking groups of 3 – 4 people. There will be opportunities to purchase groceries at a super market at least once a week, with more numerous opportunities to purchase food at smaller markets.
- The first two modules are based at campgrounds; the last three will be based out of dormitory accommodation.
- Students are responsible for bringing field mapping equipment, except Brunton compasses, GPS equipment, which will be available for loan from CSU. In addition, a group first aid kit will be loaned by CSU.
- Students and faculty will camp or stay near field project areas and use CSU vans for daily transportation to the project sites. Personal vehicles are allowed for transportation to camp sites and for use after hours. People using CSU vehicles to transport their gear must limit their gear to reasonable amounts (e.g., maximum of one week's supply of food).
- Approximately one day of free time per week is scheduled, with timing dependent on weather.

### Course Schedule:

- May 26 Field Camp starts with Bill Sanford, arrive at department ready to leave by 8:00 AM
- June 29 Return from last project

## Required and Recommended Equipment

### Field Equipment

Hand lens  
Geological hammer and holster (good rock climbing style available from Geology Club or 287 Supply on North College Ave.)  
2 hard covered field notebooks (preferably not write-in-rain type)  
Mechanical pencils (H or 2H lead best)  
Multiple widths of fiber-tipped drafting pens, must be waterproof (test them before buying!)  
Good eraser and extra lead for pencils  
Waterproofed clipboard for base maps and 9" x 9" aerial photos (min. size 10/13") with heavy acetate cover sheet to keep maps clean and dry  
Magnet (combination scriber/magnet or swing magnet preferred)  
Pocket knife (Swiss Army-type with scissors work best)  
Acid bottle (get plastic or polyethylene and label clearly!)  
Permanent, black felt-tipped marker (e.g., Sharpie)  
Mapping ruler with protractor (get an extra)  
Colored pencils (at least 12 colors: get waterproof ones!)  
Small day pack for water bottle, extra clothing, personal first aid kit, lunch, samples, camera,  
Some type of notebook case or field vest  
Chapstick and sun screen (waterproof 15+ to block UVA and UVB, not suntan lotion)  
First aid kit (small) w/ ace bandage, gauze pads, Band-Aids, Tylenol, space blanket, nylon rope, match safe  
Field glasses, camera (optional but recommended)  
(Brunton compasses and surveying equipment furnished by CSU)

### Camp Equipment

Calculator  
Triangles (30-60; and 45 deg) and straight edge  
Drafting tape (masking tape type)  
Course textbooks and handouts  
8 1/2' x 11' graph and tracing paper  
Small, lightweight drafting board (recommended masonite board available at bookstore) (ca. 18/24")  
Grain-size card (commercial or home-made)  
Equal area stereonet (laminated, keep thumb tacks separately)  
Geologic glossary (optional)

### Required Field Clothing

Sturdy hiking boots in good condition (middle-weight are best); make sure they fit well and are broken in!  
They have to cover the ankles  
Broad-brimmed hat for sun protection

### Recommended Field Clothing

Loose, comfortable clothing for very hot to very cold weather, long pants best for brush  
Watch (water resistant)  
Mittens, warm hat, for cold days  
Sunglasses (dark, neutral grey do not distort colors, glass lenses are more scratch resistant)  
Good rain/wind gear (waterproof-breathable fabrics like Goretex are recommended)

### Camping Gear

Medium-sized tent built to withstand high winds and horizontal precipitation  
Folding chair and cot (optional luxuries but much appreciated after a few weeks)  
Warm sleeping bag, foam pad, flashlight and ground cloth  
Lantern  
Small stove, cooler for food, cooking and eating utensils (organize in groups!)  
Large water container (2 to 5 gal) (CSU will provide some)  
Large duffel bag(s) for your gear  
Repair kit, with needles, thread, wire, duct tape, tools (we will have a camp tool kit)