



University at Buffalo
The State University of New York

Department of Geology
Physical and Safety Requirements for UB Geology Field Camp
(GLY 407/507: Geological Field Methods)

Catalog Description: *Applied field methods in geology. Geologic mapping field trips from a mobile base in the western United States. Mapping projects include areas of increasingly complex structure in Colorado, Utah and Wyoming.*

The course is an intensive, month-long program of immersion in the methods of geological field mapping. Students sleep in their own tents most nights. Most days, participants are in the field all day (8 AM to 4PM) and are engaged in strenuous physical activity during the whole day.

Weather: Weather at camp can be hot to cold (daytime temperatures as high as 95°F are common, and nights may fall below freezing) and dry. Skies are often cloudless and map sites commonly have little or no shade. Thus, we are exposed to the sun all day long and skin must be covered with clothing or repeated applications of sun screen. Participants should wear high-quality UV-filtering sunglasses.

Terrain: All mapping sites are wild and undeveloped. Participants must be able to hike over steep, rocky slopes, dry stream beds, and brushy hillsides. The terrain is uneven (with loose rocks, brush, and cactus), and is locally steep. Sites range from rocky canyons (with sheer cliffs, which we avoid) to rolling plains. Site elevations range from 5,000 feet to 9,000 feet above sea level.

Health & Safety: Field mapping necessarily entails some unavoidable risks. Nevertheless, UB Geology has a more than fifty-year history of safely conducting camp without serious injuries. The rugged character of the sites poses physical hazards (e.g., tripping and falling). High temperatures and strong sun also pose serious risks of dehydration and sun burn. Substantial water consumption is necessary to avoid dehydration and heat exhaustion. In addition, wild country in the western US contains dangerous animals (such as rattlesnakes, scorpions, mountain lions). All these animals will flee humans given the opportunity, but to give them this opportunity, participants must remain vigilant.

All these hazards can be avoided or minimized with caution and informed good judgment. Camp staff provide training in hazard avoidance to all camp participants. Additionally, several members of the camp staff are trained in first aid and can provide assistance with minor medical issues such as sun burn, cuts and abrasions, minor sprains, etc. For needs beyond these, we seek medical assistance at a local clinic or hospital. In the map sites, we are routinely one to two hours from emergency medical assistance.

Therefore:

- *Participants must be able to bear exposure to heat, cold, and sun like that described above.*
- *Participants must be sufficiently physically fit and in sufficiently good health to maintain strenuous physical activity like that described above and must not be at high risk for sudden onset of life-threatening medical conditions. Our experience is that strenuous exercise and elevation can aggravate preexisting but otherwise minor or hidden conditions and pose a serious health risk. All participants must ascertain that they are medically fit to attend field camp by consultation with a licensed physician.*
- *Students must be able to walk, without assistance, 5 - 10 miles per day over terrain like that described above while carrying a backpack that weighs at least 25 pounds (including lunch, 3 to 4 liters of water, emergency supplies, rain gear, and mapping equipment).*
- *Students must possess vision sufficiently keen (unaided or with correction) to be able to spot the physical hazards present in the mapping sites. They also must be able to see well enough to comprehend geological features at physical scales ranging from hand specimens (examined with a hand lens) and local outcrops observed at a distance of meters, to mountainside exposures viewed from miles away.*



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GEOLOGY FIELD CAMP

May 20 – June 16, 2020

Colorado and Utah

General Information:

The campsites are located in western Colorado, southeastern Utah and northeastern Utah, at elevations of 5000 to 9000 feet above sea level. The nights may be cold (20°F) to cool (50°F) whereas the days are generally warm to hot (65-95°F), although daytime temperatures can be as low as 30°F. The country is semiarid, but there is always the possibility of a wet season and afternoon showers are common in the spring.

It is advisable that you spend some time prior to field camp getting your legs in shape for walking and climbing. On a daily basis, a student mapping an area might walk 5 - 10 miles with most of this terrain being hilly. We will be mapping in desert (semiarid) regions, so it is essential to have several water bottles or bladders (total capacity of at least 3 liters) to take with you into the field.

You are limited to two (2) medium-sized duffle type bags (approximately 24"x15"x15"). You will have to leave anything else in Denver until Camp is over. I've outlined how we suggest that you pack your two bags. Just bring what you need (trust us, we've been doing this for 50 years and too much "stuff" will just be a pain)!

If you have any questions at all about gear, or anything else to do with field camp, please email us at glyadmin@buffalo.edu

It's going to be a great summer!!