



## Physical and Safety Requirements for Geology Field Camp - GEOS 414

Catalog Description: Field methods in geology; preparation of geologic reports; emphasis on geologic mapping; tectonics of the western North American Cordillera.

The course is an intensive five-week-long program of immersion in the methods of geological field mapping. Students and faculty will camp outdoors the entire time. Participants will be hiking most of the day (8 AM to 5 PM) over rugged topography; the work is physically strenuous. Students will spend evenings working on maps and related coursework.

**Weather:** Weather at camp can be hot to cold (daytime temperatures as high as 95°F are common, whereas nights may fall below freezing) and very dry. Skies are often cloudless and 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 sunscreen. Participants should wear high-quality UV-filtering sunglasses and full brimmed hats. UV-protectant clothing is also recommended.

**Terrain:** Study areas are wild, without trails or pavement. Participants must be able to hike over steep rocky slopes, dry stream beds, and brushy hillsides. The terrain is uneven (loose rocks and brush are common) and sometimes quite steep. Mapping areas range from rocky canyons (with sheer cliffs, which we avoid) to rolling plains. Elevations range from 5,000 feet to more than 10,000 feet above sea level.

**Health & Safety:** Fieldwork entails unavoidable risks. The rugged character of the sites poses physical hazards (e.g., tripping and falling). High temperature and strong sun also pose serious risks of dehydration and sunburn, among others. Substantial water consumption is necessary to avoid dehydration and heat exhaustion. In addition, wild country in the western US contains dangerous animals (e.g., rattlesnakes, scorpions, mountain lions, bears). All these animals will flee humans given the opportunity, but to give them this opportunity, participants must remain vigilant. Hikers should avoid distractions (e.g., loud talking and listening to music) to maximize awareness.

All the above hazards can be avoided or minimized with caution and common sense. Camp staff provide training in hazard avoidance to all camp participants. Additionally at least one member of the camp staff is trained in first aid and can provide assistance with minor medical issues such as sunburn, minor cuts and abrasions, and minor sprains. For needs beyond these, we seek medical assistance at one or another of the local clinics or hospitals. In mapping areas we are routinely more than an hour and up to a day from emergency medical assistance.

Thus:

- *Participants must be prepared for 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 five to ten miles per day over terrain like that described above while carrying a backpack weighing 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 field 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 mountain side exposures viewed from miles away.*
- Students who do not meet these requirements cannot complete GEOS 414.*

Further, students are expected to maintain a professional and respectful attitude towards instructors and other participants at all times. Patience, tolerance, and a sense of humor towards unexpected hardships (e.g., cold weather) will serve students well over the course of the month-long field experience. Behaviors that are inappropriate in the classroom (e.g., inappropriate language directed at instructors or other students, excessive drinking, violations of safety policies) will similarly not be tolerated at field camp. Students in violation of any policies will be dismissed from the course at the discretion of the camp director.

By signing this form, the participant:

- 1) Acknowledges all of the above warnings and policies;
- 2) Will follow all additional safety instructions given by instructors in the field; and
- 3) Acknowledges that violating these policies comes at the twin perils of unnecessary risk to personal safety and potential removal from the course.

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Signature

\_\_\_\_\_  
Date

Student ID Number (UA Students only)\_\_\_\_\_