

**GEOL 290, Field Geology I**  
**Course Syllabus**

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**Textbook:** Freeman, T., 2010. *Geology Field Methods*, FriendShip Publications.

**Additional Reading:** Compton, R., 1962. *Manual of Field Geology*, John Wiley & Sons.

<u>Course Outline</u>		
Week	Topic	Dates
1	<b>AM:</b> Reading & contouring topographic maps, plotting a course, locations/orienteering, field safety and planning	5/18
	<b>PM:</b> Using a GPS, intro to compass, measure pace & eye height	
	<b>AM:</b> Logistics, field notes, lithology descriptions, methods for measuring strike & dip, budgeting for fieldwork	5/19
	<b>PM:</b> Orienteering exercise, strike & dip (Robinson Park)	
	<b>AM:</b> Measuring a section, map symbols, drawing a strat column	5/20
	<b>PM:</b> Strat column exercise, rock & mineral description and ID	
	<b>AM:</b> Basic skills for geologic mapping: contacts & faults, closing a traverse	5/21
	<b>PM:</b> Mapping traverse	
	<b>AM:</b> Field mapping exercise (on campus)	5/22
	<b>PM:</b> Making a geologic map, cross-sections, reconnaissance for geologic mapping	
2	Field mapping exercise I (Kamiak Butte)	5/25
	Field mapping exercise II (Granite Point)	5/26
	<b>Wednesday:</b> Get ready for travel to UT (no class)	5/27
	<b>Field trip: Hurricane UT</b>	
	<b>Thursday AM:</b> Depart Moscow ID, 7:00AM	5/28
	<b>Friday AM:</b> Arrive Hurricane UT	5/29
	<b>Friday PM:</b> First exercise: Harrisburg Junction	
	<b>Saturday:</b> Complete Harrisburg Junction map	5/30
	<b>Sunday AM:</b> Optional trips or break	5/31
3	<b>Sunday PM:</b> Intro to Timpoweap Canyon	
	<b>Monday AM:</b> Timpoweap Canyon canal hike	6/1
	<b>Monday PM:</b> Mid-day break; evening mapping	
	<b>Tuesday AM:</b> La Verkin overlook & trail	6/2
	<b>Tuesday PM:</b> Mid-day break; evening mapping	
	<b>Wednesday:</b> Field mapping (cont'd)	6/3
	<b>Thursday AM:</b> Complete final project	6/4
	<b>Thursday PM:</b> Complete project OR optional trips	
	<b>Friday AM:</b> Depart Hurricane UT	6/5
<b>Saturday PM:</b> Arrive Moscow ID	6/6	

## Learning Outcomes and Assessment

At the conclusion of the course, the student should be able to:

- Interpret a topographic map, complete an orienteering course with map and compass.
- Plot a traverse and distribute the closure error between stations.
- Measure strike and dip, and describe rocks in the field.
- Recognize and interpret folds, faults, dipping strata in the field, and from topographic and geologic maps.
- Keep a professional-quality field notebook.
- Measure a stratigraphic section and carry out a basic field survey.
- Prepare a basic geologic map that includes critical components, such as a key for map symbols, north arrow, scale, unit descriptions, etc.
- Estimate a project budget, and be familiar with the basics of preparing a field safety plan.

There will be a number of graded projects; for both group and individual projects, each student will be responsible for turning in an individual report. All projects will be graded, and a final grade will be assigned according to the usual scheme of 91–100% = A, 81–90% = B, etc.

## Camping and Fieldwork

This course focuses on teaching practical methods for fieldwork in geology, and much of the instruction takes place outdoors, in unpredictable weather. We will be departing Moscow ID for UT at 7:00AM on Thursday May 28. If you miss the vans, you will fail the course! **Students are responsible for providing their own camping and outdoor equipment appropriate for any conditions that may be encountered**, including (but not limited to) tents, sleeping bags, rain gear, **sturdy field boots**, and similar, for the Idaho and Utah portions of the course. Students should be prepared to walk long distances (up to five miles), work in direct sun at high temperatures, and are **required to start each field day with at least two liters (2 L) of drinking water while working in the Utah field area**. If you need assistance in finding/renting field equipment, please contact the instructor well ahead of time for assistance.

**NOTE THAT THE CLASS WILL NOT BREAK FOR THE MEMORIAL DAY HOLIDAY (Monday May 25).** The compressed course schedule does not allow flexibility in this regard. Please plan accordingly.

## Accommodation for Disabilities

Students that require reasonable accommodation for documented disabilities should contact the instructor and the Center for Disability Access and Resources (CDAR) (208.885.6307 or cdar@uidaho.edu) prior to registration. I will make every effort to accommodate *documented* disabilities.