

Syllabus –PTYS 594
Planetary Geology Field Studies

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Times and locations: All meetings in room 312 of the Kuiper building. The trip dates and preparation meetings vary each semester and are not planned until our first meeting. If you are not an LPL graduate student, then it is important to contact the instructor directly when you enroll so you can be added to our fieldtrip mailing list.

I have a general open-door policy, so you can stop by anytime. I'm not always available though, so email in advance to be sure of catching me.

We run the trip each semester to sites of interest in the local area. 'Local' is a loose term incorporating everything from northern Mexico to southern Colorado and the Pacific coast to western Texas. The length of the trip is typically 3-5 days. Transportation and water are provided, but the students provide everything else i.e. their own camping gear, food and drink.

We camp each night and the campsites are often primitive i.e. no established toilets or running water. Please read the 'General Information' on the class website (URL below).

Course Website:

Semester-specific and general information on the course will be posted on a class website at:

<https://pirlwww.lpl.arizona.edu/wiki/Fieldtrip>

Scope of Course:

Planetary surfaces sit at the interface between the planet's atmosphere and interior and are also often exposed to exogenic processes like impacts and space-weathering. This makes them very complex to understand, but also rich historical archives that record changing conditions on that planet over the course of solar system history.

In this class, we will visit terrestrial geologic sites that are analogs of sites on other planetary surfaces. Through first hand inspection and analysis of remote sensing data students will build geologic intuition. There are no course prerequisites and anyone may enroll (undergraduates must be seniors to enroll for credit).

Course credit

Everyone on the trip actually participates. This is the case whether they have any geologic background or not. This participation involves choosing a topic during the pre-trip meeting (most, but not all, topics are geological - there are cultural and ecological topics as well). After choosing the topic you will do some

background reading and write a brief (3-5 pages) outline with whatever figures are needed. The best outlines make heavy use of bulleted lists and figures rather than large expanses of text. The style is free form, but each outline typically ends with the connection to planetary geology (e.g. where have these features been seen on other planets or what would it mean for a planet's history if such features were someday discovered there). It should take about one day to do the reading and write the outline.

This is a pass/fail one-unit course. A pass is earned by preparing the handout, participating in the trip and presenting your work in the field. An 'S' grade may be awarded for going beyond these expectations e.g. preparing the fieldguide, driving the vehicles, demonstrating equipment in the field, assistance with logistics, advance scouting etc...

Required or Special Materials

Field books, hand lenses, and any other educational materials that may be required for the field will be provided.

All other materials (e.g., camping equipment, food) will not be provided and are the student's responsibility to obtain.

PLEASE talk to the instructor in advance of the trip if you are at all unsure of what you need to take with you.

Accessibility and Accommodations:

At the University of Arizona we strive to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, you are welcome to let me know so that we can discuss options. You are also encouraged to contact Disability Resources (520-621-3268) to explore reasonable accommodation.

Class Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

When in the field or vehicles collaborative behavior is expected. I especially expect an environment free of threatening, discriminatory or harassing behavior. Students should not take risks that put themselves or the group in danger – this includes behavior so negligent that it creates risk.

Respect for the sites we visit is essential. Pay attention to what's around you as there are many dangerous plants and animals that could negatively impact you. Likewise, some sites we visit may have significance to native peoples or be protected for other reasons – be sure to behave in a way that does not negatively impact these sites.

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

UA Nondiscrimination and Anti-harassment Policy

Harassment or discrimination of any kind will not be tolerated. The University is committed to creating and maintaining an environment free of discrimination and harassment; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Subject to Change Statement

Work and course requirements (which ironically includes this statement) are subject to change at the discretion of the instructor with proper notice to the students.