Planetary Geology Field Studies (1 Credit)

Syllabus – Fall 2017 – PTYS 594A

Lecture Times: Friday 4:00–5:00pm
Classroom: 312 Kuiper Space Sciences Building
Primary Instructor: Dr. Christopher Hamilton, Assistant Professor
Office: 430 Kuiper Space Sciences Building
Office Hours: Tuesday and Thursday 11:00 AM – Noon, or by appointment
E-mail: hamilton@lpl.arizona.edu
Office Telephone: +1-301-305-3818

Course Content, Goals, and Objectives:
This course will provide students with first-hand experience related to geologic processes and features, focusing on how those features/processes relate to the surfaces of other planets and how accurately those features/processes can be deduced from remote sensing data. This semester PTYS 594A will focus on the Antelope Canyon region of northern Arizona with a field trip scheduled for October 6–8. The goals and objectives of the course are to learn about exploring stratigraphic, tectonic, aeolian, and fluvial processes. Students may enroll in the course up to 10 times for credit but only three enrollments will count toward the major.

Workload Expectation and Requirements:
• Lecture Times: Lectures will be held in Room 312 on Fridays from 4:00–5:00pm to aid in the preparation for the field, develop course projects, and to discuss the outcomes of the field trip.
• Course Website: Lectures, homework assignments and general information related to the course will be available online on the following class websites:
  
  The University of Arizona’s “Desire2Learn” (D2L) Website: https://d2l.arizona.edu/d2l/loginh/

  The Lunar and Planetary Laboratory (LPL) Fieldtrip Wiki: https://pirlwww.lpl.arizona.edu/wiki/Fieldtrip

• Workload Expectations: Students are expected to prepare a report related to their choice of topic (with instructor approval), which will be submitted in advance of the field trip and presented at the most appropriate location in the field. Students are also expected to participate in field trip planning sessions and post-field trip discussions. While in the field, each student will be required to participate in field-based exercise and develop geological descriptions and data entries into their own notebook, which submitted for review at the end of the field trip.
• Office Hours: The instructor (Christopher Hamilton) will be available for questions and discussion on Tuesday and Thursdays (11:00 AM – Noon), or by appointment.
• This course is intended for graduate students with little previous exposure to geosciences and remote sensing. The course is complementary with PTYS/GEOS 554 (Planetary Surfaces).
• There are no course prerequisites.
Grading:
Grading for this course will be: S, P, F (Superior, Pass, Fail) based on:

- Participation: 10%
- Field Trip Report: 50%
- Field Trip Presentation: 20%
- Field Notebook: 20%

There will be no final exam.

Grades are assigned as follows: S ≥ 90%, 90% > P ≥ 50%, and F < 50%.

Class Policies (Due dates, absences, late work):
- Assignments are due at the beginning of class on the due date (or before). If an assignment is due, you are responsible for turning it in, even if you are absent from class. Late work will generally not be accepted. If it is accepted, a penalty of 20% will be applied to the assignment’s score (out of 100%). Absences for university-approved activities for which you have in advance a note of dean’s approval will be excused, or other arrangements will be made. If you will be absent due to a religious holiday, please let me know in advance. Absences for other reasons will not be excused unless special dispensation was received prior to the deadline.

Academic Integrity:
- Students are encouraged to discuss the structure of their projects with other students; however, previously completed class projects may not be submitted for credit and evaluated material is expected to be your work and your work only.
- You are expected to know and to abide by the University’s Academic Integrity policy. The details are at http://deanofstudents.arizona.edu/codeofacademicintegrity.
- The instructor reserves the right to utilize electronic means to help prevent plagiarism. Students agree that by taking this course, all assignments are subject to submission for textual similarity review to turnitin.com. Assignments submitted to turnitin.com will be included as source documents into turnitin.com’s restricted access database solely for the purpose of detecting plagiarism in such documents.

Students with Disabilities:
- 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. Please be aware that the accessible table and chairs in Room 312 should remain available for students who find that standard classroom seating is not usable.

Revision of the Syllabus:
- The course workload and course requirements (i.e., content, reading materials, and the structure of graded assignments) are subject to change, with reasonable advanced notice, as deemed appropriate by the instructor.
Class Schedule:

**Week 1**  
No Class  
Friday, August 25: Class will not be held on this date due to a scheduling conflict with the Graduate Admissions and Advising Committee (GAAC).

**Week 2**  
Pre-Field Trip Meeting I  
Friday, September 1: Preliminary discussion of field trip logistics.

**Weeks 3**  
Pre-Field Trip Meeting II  
Friday, September 8: Selection of term-paper report topics by each student.

**Week 4**  
Pre-Field Trip Meeting III  
Friday, September 15: Introduction to field observations and note taking.

**Week 5**  
Pre-Field Trip Meeting IV  
Friday, September 22: Introduction to the field-based exercise.

**Week 6**  
Pre-Field Trip Meeting V  
Friday, September 29: Final preparations for the field trip.

**Week 7**  
Field Trip  
Friday, October 6–8: Field trip to the Antelope Canyon region.

**Week 8**  
Post-Field Trip Meeting  
Friday, October 13: Final field trip meeting for the semester, which will focus on discussing field trip outcomes and to decide on the next field trip location. Field notebooks will be returned and discussed during class.

**Textbook Requirements:**

- No textbook are required for this course.