**GEOS 4686: Geology Field Camp, Summer, 2019**

**Faculty: Celina Suarez, Greg Dumond, Andrew Lamb, Adriana Potra, Phil Hays**

**TAs: Julie Cains, David Baylor, Danielle Oberg**

**Class Synopsis**: This course will cover basic geologic field methods including geologic mapping, stratigraphic section measurement, hydrologic field measurements, and water geochemistry. These methods are taught amongst a backdrop of the geology and hydrogeology of the Southwestern Montana area. The geologic history from the Precambrian basement, Sevier Fold and Thrust belt, Holocene glacial morphology, and mining activities will be emphasized.

**Class Book:** UA Geology Field Camp Handbook

**Course Objectives:** The objective of this course is to become proficient in: geologic field mapping, orienteering, stratigraphic section measurement, field rock identification, reconstructing a geologic history of an area, structural geology, hydrogeology measurements, field geochemistry measurement, glacial geomorphology measurements, and proper field book note taking.

**Course supplies (required)**

Pencils and Pens

calculator

Write-in-the-rain fieldbook – provided

Clipboard – provided

Permanent ink pens 005 – provided

Protractor

Ruler

Map pencils – 12 colors minimum

Rock hammer

Compass – provided

Hand lens

**Class Projects and Points**

Frying Pan Mapping Project 80 pts

Stratigraphy and Paleocurrent Analysis 105 pts

Big Hole Mapping Project 210 pts

Solo Mapping Project 100 pts

Timber Hill Mapping Project 150 pts

Glacier National Park Field Trip and Fieldbooks 50 pts

Elkhorn Spring Hydrogeology Project 50 pts

Coolidge Ghost Town Hydrogeology Project 150 pts

Kelly Reservoir Mapping Project 105 pts

Yellowstone-Grand Tetons National Park Fieldbooks 50 pts

1000-900 pts = A

899-800 pts = B

799-700 pts = C

699-600 pts = D

>600 pts = F

**Grades and Grade-point breakdown**:

Grade Point Breakdown

is based on percentages

and an A through F breakdown

**Attendance**: Attendance is required. Unexcused absences from field work will result in a reduction of one letter grade per day of missed field work such that a maximum grade you can receive is a B, followed by a C, and so on and so forth. An excused absence includes sickness or injury. We take the health of our attendee seriously; medical facilities are available in Dillion and several of the field camp members are trained in Wilderness First Aid. Please consult TAs and Faculty if you feel you are sick or injured. Note: Sickness due to “overindulgence” at the local “watering holes” is NOT an excused absence. Please make your choices wisely and look after each other.

**Academic Integrity:** Each University of Arkansas student is required to be familiar with and abide by the University’s ‘Academic Integrity Policy’ which may be found at http://provost.uark.edu/ Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

Unauthorized review of maps is NOT allowed. ***GPS and mapping software/apps such as GAIA is NOT allowed unless specified.***

**Emergency Procedures**

Many emergencies can befall the group in the field. All TA’s and faculty are equipped with 2-way radios. If the need for evacuation from the field is required we will inform all members of the party.

**Field Partners**

Field partners for all field project will be assigned randomly by faculty and are subject to change by faculty and staff. No exceptions. Field partner numbers will range from 2 to 4 as necessary.