ANTH 5330/6330
GEOARCHAEOLOGY
FALL 2017

Lecture: Monday, 3:30-6:00 pm
Old Main 006
Instructor: Judson Finley
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Office Hours: Monday and Wednesday 10:00-11:30, or by appointment

Course Fee: $25.00

Course Description

All archaeologists work in a geological context. In conducting a survey, it is critical to understand the spatial relationships between the archaeological record and associated landforms. In excavating a site, it is essential to understand the origin and depositional mode of sediments containing the cultural record. It is also necessary for archaeologists to understand the physical post-depositional processes that modify the archaeological record. And finally, because environment affects culture in some way, sediments are relevant to archaeologists as records of paleoenvironment. This course is designed for upper division undergraduate and graduate students with variable backgrounds in archaeological, earth, or soil science who are seeking to gain those skills. The course is an overview that integrates the various subfields of geology, geomorphology, and soils geography into an archaeological context.

Learning Objectives

- Students will gain a broader understanding and appreciation of archaeology as an interdisciplinary Earth science
- Students will gain factual knowledge about geomorphic systems directly contributing to the formation of archaeological sites
- Students will apply course materials to understand complexity in the natural and behavioral dimensions of archaeological site formation
- Students will critically evaluate the contribution of archaeology to understanding of Quaternary climate reconstruction

Requirements

This course is a mixed lecture and seminar format. Attendance and participation are vital to your success, which means you must keep up with the readings. Grades for this class are based on five individual components: class participation (25%), a short
research paper (25%), and three exams (50%). Full participation in class discussions is expected, which means completing the weekly readings prior to class. Graduate students will be required to attend mandatory field trips and complete additional research (see Graduate Student Syllabus Addendum).

**FINAL EXAM—Wednesday May 3, 2017, 3:30-5:20, OLD MAIN 006**

**Required Texts:**


**COURSE SCHEDULE**

| Week 1 | January 9-13, 2017 | Philosophy and History of Geoarchaeology  
READING: Waters (1992):1-13; Chamberlain (1890); Hassan (1979) |
| Week 2 | January 16-20, 2017 | Earth History: Geologic Time Scale and Plate Tectonics  
READING: Fillmore (2011); Hintze (1988)  
FILM: Colliding Continents  
*No Class Meeting Monday January 16, 2017  
**Canvas Quiz (25 points)* |
| Week 3 | January 23-27, 2017 | Quaternary Geoscience in Archaeology  
READING: Holliday (2001); Haynes (1990); Antevs (1955) |
| Week 4 | January 30-February 3, 2017 | Quaternary Geochronology  
READING: Bradley (1999); Kennett et al. (2014); Pederson et al. (2014) |
| Week 5 | February 6-10, 2017 | Weathering, Sediment Production, and Transport  
| Week 6 | February 13-17, 2017 | Stratigraphy and Alluvial Processes  
*Exam #1 (100 Points)* |
| Week 7 | February 20-24, 2017 | Alluvial Processes: Case Studies  
*No Class Monday February 20, 2017  
**Monday Schedule on Tuesday February 21, 2017* |
| Week 8 | February 27-March 3, 2017 | Eolian Processes  
| Week 9 | March 6-10, 2017 | SPRING BREAK—NO CLASS |
### Additional Readings


IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), qualified students with disabilities may be eligible for reasonable accommodations. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, 797-2444 voice, 797-0740 TTY, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print or digital) are available with advance notice.

IN COMPLIANCE WITH THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA), it is the policy of the Department of Sociology, Social Work & Anthropology at Utah State University to maintain the confidentiality of students' records. When it is not feasible to distribute exams, papers, and other assignments to students individually (e.g., in large-enrollment classes), the instructor may obtain from students a signed waiver of confidentiality regarding class assignments so exams, papers, and other academic exercises may be placed out during class or during other group sessions for students to pick up. A general waiver may be sought from each student at the beginning of the academic term with the understanding that the waiver may be rescinded, in writing, during the academic term if the student chooses. If a student does not sign a waiver, then assignments must be returned to that student confidentially.