



The University of Jordan

Faculty: Archaeology & Tourism
Department: Cultural Resources Management and Conservation
Semester: First Semester
Academic Year: 2015/2016
Course Name: Geoarchaeology
Credit hours: 3 hours
Elective or Compulsory requirement course: Compulsory requirement

Course Description

This course explains how to use the concepts and methods of earth sciences in the interpretation of archaeological records and human past, as well as in the preservation and conservation of archaeological sites and artifacts. Topics include the reconstruction of past landscapes and site formation processes through the analysis and interpretation of sediments and soils associated with archaeological remains.

Learning Objectives

1. To explain how archaeological sites are formed and why they are part of the sedimentary and soil records.
2. To provide an understanding of how earth sciences help to better understanding archaeological records and how archaeology helps to better understanding geological.
3. To show how sediments and soils record the history of past environments and past human behaviour.
4. To provide an overview of the potential of the sedimentary and soil records in interpreting archaeological sites and the preservation/deterioration of archaeological finds.

Intended Learning Outcomes (ILOs):

Successful completion of the course should lead to the following outcomes:

A. Knowledge and Understanding: Student is expected to

A1- Show a better understanding of the methods and issues involved in the study of archaeology and cultural heritage.

A2- Learn how to determine the different environmental factors and to explain their symptoms and processes.

A3- be able to discriminate on a given site or landscape between features related to natural effects and human action.

A4- Understand the specificity of the relationship between archaeology and the physical environment.

B. Intellectual Analytical and Cognitive Skills: Student is expected to

B1- Develop his capacity in interpreting and explaining what he observes in the physical landscape.

- B2-** demonstrate an understanding of how evidence can be collected and interpreted.
B3- better understand the wider theoretical debates on past human behavior and past environments.



Learning and Evaluation Methods

ILO/s	Learning Methods	Evaluation Methods
	Lectures, presentations, field trips and discussions.	Exams, presentations of individual or group works.

Course Contents

Content	Week	ILO/s
General framework: definitions, concepts and basic principles	Week 1	Lectures and discussion
Timescale of the Earth geologic history	Week 2	Lectures, PowerPoint presentations and discussion
Main types of rocks	Week 3	Lectures, PowerPoint presentations and discussion
Factors generally involved in shaping the earth surface	Week 4 and 5	Lectures, PowerPoint presentations and discussion
Techniques of dating	Week 6	Lectures, PowerPoint presentations and discussion
Landscape (off-site) geoarchaeology (sediments, soils and stratigraphy)	Week 6 and 7	Lectures, PowerPoint presentations and discussion
On-site georachaeology (site formation processes)	Week 8 and 9	Lectures, PowerPoint presentations and discussion
Rebuilding ancient environments	Week 10 - 11	Lectures, PowerPoint presentations, discussion and fieldtrip
Geoarchaeology for surveying and recording	Week 12-13	Lectures, PowerPoint presentations and discussion
Methods and techniques used in geoarchaeology	Week 14	Lectures, PowerPoint presentations and discussion

*some adjustments could happen according to the weeks due to the exams and other academic activities.



Evaluation

Evaluation	Point %	Date
Midterm Exam	30	Around April 1 st
Individual / group work presentations	15	Week of 19-24 April
Participation	5	
Final Exam	50	In May

Main References:

- 1-Paul Goldberg and Richard Macphail. 2005: Practical and Theoretical Geoarchaeology. Wiley-Blackwell
- 2-George Rapp and Christopher Hill. 2006: Geoarchaeology: The Earth-Science Approach to Archaeological Interpretation. Yale University Press; 2d edition
- 3-Karl W. Butzer. 2006: Archaeology as Human Ecology : Method and Theory for a Contextual Approach.
- 4-Dena F. Dincause. 2000: Environmental Archaeology: Principles and Practice. Cambridge University Press.
- 5-Other references (articles in French and English) available upon request.

Course Teacher

Head of the Department

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Dr. Fuad Hourani

Dr. Fuad Hourani

Dr. Maysoon Alnahr