Form: Course Syllabus		
	Form Number	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
	Number and Date of Revision or Modification	2023/10/15
	Deans Council Approval Decision Number	265/2024/24/3/2
	The Date of the Deans Council Approval Decision	2024/1/23
	Number of Pages	06

1.	**Course Title**	Geoarchaeology
2.	**Course Number**	2602204
3.	**Credit Hours (Theory, Practical)**	3
	Contact Hours (Theory, Practical)	3 Theory
4.	**Prerequisites/ Corequisites**	N/A
5.	**Program Title**	Cultural Resources Management and Conservation
6.	**Program Code**	02
7.	**School/ Center**	Archaeology and Tourism
8.	**Department**	Cultural Resources Management and Conservation
9.	**Course Level**	3d year
10.	**Year of Study and Semester (s)**	2025/2026 First & Second Semesters
11.	**Program Degree**	BA
12.	**Other Department(s) Involved in Teaching the Course**	N/A
13.	**Learning Language**	Arabic
14.	**Learning Types**	☐ Face to face learning ☒Blended ☐Fully online
15.	**Online Platforms(s)**	☒Moodle ☐Microsoft Teams
16	**Issuing Date**	
17.	**Revision Date**	

18. Course Coordinator:

Name: Dr. Fuad Hourani Contact hours: S,T,TH: 12:30-13:00 & M, W: 13:00-14:30

Office number: Phone number: 25047

Email: f.hourani@ju.edu.jo

19. Other Instructors:

Name: Office number: Phone number: Email: Contact hours: Name: Office number: Phone number: Email: Contact hours:

20. 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 artefacts. Topics include the reconstruction of past landscapes and site formation processes through the analysis and interpretation of sediments and soils associated with archaeological remains.

21. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

PILO's	***National Qualifications Framework Descriptors***		
	Competency (C)	**Skills (B)**	**Knowledge (A)**
1. Applies the principles of critical and objective thinking in addressing heritage protection issues.	☐	☐	☒
2. Identifies and deeply understands problems and challenges, analyzing the complex aspects of heritage and influencing factors, providing comprehensive and detailed assessments.	☐	☐	☒

3. Develops innovation and entrepreneurship skills in the field of heritage resource management, exploring new opportunities for funding and development.	☐	☐	☒
4. Engages and discusses effectively with local communities and groups interested in heritage, understanding the impact of heritage resources on cultural identity and community development.	☐	☐	☒
5. Identify, understands, and critically evaluates academic sources, articles, and research related to heritage and its management to extract main ideas and fundamental concepts.	☐	☒	☐
6. Listens attentively and focused to lectures and discussions, engaging with the presented content thoughtfully and comprehensively	☐	☒	☐
7. Selects and critically evaluates information and ideas, independently analyzing data and evidence.	☐	☒	☐
8. Develops and identifies strategies for problem-solving, applying acquired concepts and skills in practical contexts.	☐	☒	☐
9. Utilizes various digital technologies and tools in managing, documenting, and conserving heritage resources, such as using electronic information management systems and imaging, documentation, and analysis techniques.	☐	☒	☐
10. Innovates new and creative solutions to the challenges of heritage resource management and conservation.	☒	☐	☐
11. Collects and comprehensively analyzes data and information, extracting main ideas and fundamental concepts.	☒	☐	☐
12. Evaluates results, monitors performance, and analyzes data and information to determine the achievement of goals and identify areas needing improvement and development.	☒	☐	☐
13. Implements effective plans and strategies for managing heritage resources, organizing relevant activities and events.	☒	☐	☐

* Choose only one descriptor for each learning outcome of the program, whether knowledge, skill, or competency.

22. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

	The learning levels to be achieved	

Course ILOs #	Remember	Understand	Apply	Analyse	Evaluate	Create	Competencies
K1: Define, explain and use the terminology, concepts and basic principles of geoarchaeology.	√		√		√		K
K2: Name the foremost scientific techniques used in earth sciences and archaeology.	√			√		√	K
K3: Mach the wider theoretical debates on past human behaviour and environments.	√	√		√	√		K
S1: Discriminate between features related to natural effects and those of human action.			√			√	S
S2: Determine effects of environmental factors on sites and the landscape and explain their processes.		√		√	√		S
S3: Describe the physical environment, as well as the stratigraphic sequence, of a given site.	√	√			√		S
C1: Appraise the geological and geomorphological environments associated with archaeological remains.			√			√	C
C2: Explain how evidence can be			√	√	√		C

collected and interpreted.							
C3: Build causal relations between factors and effects.			√	√	√		C

23. The matrix linking the intended learning outcomes of the course -CLO's with the intended learning outcomes of the program -PILOs:

PILO's * / CLO's	1	2	3	4	5	6	7	8	9	10	11	12	13	Descriptors**		
														A	B	C
K1: Define, explain and use the terminology, concepts and basic principles of geoarchaeology.		√	√					√						√		
K2: Name the foremost scientific techniques used in earth sciences and archaeology.		√		√							√			√		
K3: Mach the wider theoretical debates on past human behaviour and environments.	√							√			√			√		
S1: Discriminate between features related to natural effects and those of human action.								√	√	√					√	
S2: Determine effects of environmental factors on sites and the landscape and explain their processes.	√									√			√		√	
S3: Describe the physical environment, as well as the					√										√	

stratigraphic sequence, of a given site.															
C1: Appraise the geological and geomorphological environments associated with archaeological remains.									√	√					√
C2: Explain how evidence can be collected and interpreted.					√		√								√
C3: Build causal relations between factors and effects.			√									√			√

***Linking each course learning outcome (CLO) to only one program outcome (PLO) as specified in the course matrix.**

****Descriptors are determined according to the program learning outcome (PLO) that was chosen and according to what was specified in the program learning outcomes matrix in clause (21).**

24. Topic Outline and Schedule:

Week	Lecture	Topic	ILO/s Linked to the Topic	Learning Types (Face to Face/ Blended/ Fully Online)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1 1.2 1.3	General framework: Concepts, definitions, basic principles	K1, K2	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions	See references in section 28
2	2.1 2.2 2.3	Timescale of the Earth geologic history	K, C1	Face to face	Class room	Sync.	Exams, Individual/Group presentations &	

					& Moodle		Participation in class discussions
3	3.1 3.2 3.3	Main types of rocks	C1, C2, C3	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions
4	4.1 4.2 4.3	Factors generally involved in shaping the landscape.	C1 K3	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions
5	5.1 5.2 5.3						
6	6.1 6.2 6.3	Techniques of dating	K2, C2	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions
7	7.1 7.2 7.3	Landscape (off-site) geoarchaeology: sediments, soils and stratigraphy.	K2, C2 K2, C2	Face to face	Class room, Moodle & field trips	Sync.	Exams, Individual/Group presentations & Participation in class discussions
8	8.1 8.2 8.3						
9	9.1 9.2 9.3	On-site georachaeology (site formation processes): natural processes and anthropic ones.	K2, S1 S1, S2	Face to face	Class room, Moodle & field trips	Sync.	Exams, Individual/Group presentations & Participation in class discussions
10	10.1 10.2 10.3						
11	11.1 11.2 11.3	Rebuilding ancient environments	C3,S3	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions
12	12.1 12.2 12.3						
13	13.1 13.2		K2,S2	Face to face	Class room	Sync.	Exams, Individual/Group

	13.3	Geoarchaeology for surveying and recording			& Moodle		presentations & Participation in class discussions
14	14.1 14.2 14.3	Methods and techniques used in geoarchaeology	K2,S1	Face to face	Class room & Moodle	Sync.	Exams, Individual/Group presentations & Participation in class discussions
15	15.1 15.2 15.3						

25. Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Evaluation Activity	*Mark wt.	CILO's								
		K1	K2	K3	S1	S2	S3	C1	C2	C3
First Exam	30	√	√	√			√	√		
Second Exam –If any	5	√								
Final Exam	40	√	√	√	√	√	√	√	√	√
**Class work										
Projects/reports										
Research working papers										
Field visits										
Practical and clinical										
Performance Completion file										
Presentation/ exhibition	15	√		√						
Any other approved works										
Total 100%										

*** According to the instructions for granting a Bachelor's degree.**

****According to the principles of organizing semester work, tests, examinations, and grades for the bachelor's degree.**

Mid-term exam specifications table*

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CILO/ Weight	CILO no.
Create **%10**	Evaluate **%10**	analyse **%10**	Apply %20	Understand **%20**	Remember %30					
	1			1	1	3	30	10	30%	K1
		1			1	2			20%	K2
	1		1	1		3			30%	K3
			1		1	2			20%	C1

Final exam specifications table

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CILO Weight	CILO no.
Create **%10**	Evaluate **%10**	analyse **%10**	Apply %20	Understand **%20**	Remember %30					
	1	1				2	40	15	10%	K1
					2	2			15%	K2
				1		1			10%	K3
2						2			10%	S1
1						1			10%	S2
			1			2			15%	S3
	1		1			2			10%	C1
	1	1				2			10%	C2
				1		1			10%	C3

26. Course Requirements:

(e.g.: students should have a computer, internet connection, webcam, account on a specific software/platform…etc.):

27. Course Policies:

A- Attendance policies: As per the university rules

B- Absences from exams and submitting assignments on time: As per the university rules

C- Health and safety procedures: As per the university rules

D- Honesty policy regarding cheating, plagiarism, misbehavior: As per the university rules

E- Grading policy:

F- Available university services that support achievement in the course:

- JU Library
- Faculty conservation lab.

28. References:

A- Required book(s), assigned reading and audio-visuals:

E-learning coarse page

B- Recommended books, materials, and media:

1- Karl W. Butzer. 2006: Archaeology as Human Ecology : Method and Theory for a Contextual Approach.
2- Dena F. Dincause. 2000: Environmental Archaeology: Principles and Practice. Cambridge UniversityPress.
3- Paul Goldberg and Richard Macphail. 2005: Practical and Theoretical Geoarchaeology. Wiley-Blackwell
4- Elizabeth J. Reitz and Elizabeth S. Wing. 2008: Zooarchaeology (Cambridge Manuals in Archaeology). Cambridge University Press; 2d edition
5- Christine A. Hastorf. 1989: Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains (Prehistoric Archeology and Ecology series). University of Chicago Press; 2nd edition
6- Other references (in French and English) available upon request.

29. Additional information:

Name of the Instructor or the Course Coordinator:	Signature:	Date:
Dr. Fuad Hourani……	……...……	11/01/2026……..
Name of the Head of Quality Assurance Committee/ Department	Signature:	Date:

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Name of the Head of Department	Signature:	Date:
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Name of the Head of Quality Assurance Committee/ School or Center	Signature:	Date:
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Name of the Dean or the Director	Signature:	Date:
…….	……..……	……..……