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**	Conservation and Restoration of Glass and Pottery
2.	**Course Number**	2632442
3.	**Credit Hours (Theory, Practical)**	3
	Contact Hours (Theory, Practical)	3
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**	Fourth year
10.	**Year of Study and Semester (s)**	1/2025-2026
11.	**Program Degree**	BA
12.	**Other Department(s) Involved in Teaching the Course**	N/A
13.	**Learning Language**	English
14.	**Learning Types**	☐**Face to face learning** ☐Blended ☐Fully online
15.	**Online Platforms(s)**	☐Moodle ☐**Microsoft Teams**
16	**Issuing Date**	9/2018
17.	**Revision Date**	9/2024

18. Course Coordinator:

Name: Dr. Yazan Abu Alhassan	Contact hours:
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19. Other Instructors:

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20. Course Description:

This course focuses on the deterioration of glass and pottery. It also focused on the recent methods and materials used for the restoration and conservation of both materials. Critical issues related to the treatment of corroded glass and glazed surfaces are considered. Practical training is carried out in the laboratory.

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)**
Distinguish between the different methods for conserving and restoring archaeological pottery in situ and in the laboratory.	☐	☐	☒
Recognize the most suitable environment to preserve the	☐	☐	☒

archaeological glass and pottery.			
Distinguish between the archaeological pottery and glass and the methods of their production.	☐	☒	☐
Distinguish between the tendency to deterioration of archaeological pottery and glass.	☐	☒	☐
Recognize the different methods for conserving archaeological glass and pottery according to their condition.	☒	☐	☐

* 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)

Course ILOs #	The learning levels to be achieved						Competencies
	Remember	Understand	Apply	Analyse	Evaluate	Create	
Distinguish between the different methods for conserving and restoring archaeological pottery in situ and in the laboratory.	X	X					**Knowledge**
Recognize the most suitable environment				X			**Knowledge**

to preserve the archaeological glass and pottery.						
Distinguish between the archaeological pottery and glass and the methods of their production.		**X**			**X**	**Skills**
Distinguish between the tendency to deterioration of archaeological pottery and glass.				**X**		**X**	**Skills**
Recognize the different methods for conserving archaeological glass and pottery according to their condition.		X				X	**Competency**

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	X		X			X		X						X		
K2			X											X		
S1							X			X					X	
S2						X						X			X	
C1												X	X			X

*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 Conservation ethics and process of conservation & restoration of glass & pottery	1.1	Principles of professional conservation ethics.	K1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	1.2	Ethical challenges specific to glass and pottery restoration.	K1,K2	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	1.3	Steps and workflow in	S1	Face to face			• Interactive lectures • Presentations	

		conservation and restoration processes.					• Group-Based • Learning Discussion	
2 The composition & manufacture of archaeological glass & pottery	2.1	Raw materials used in ancient glass and pottery.	S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	2.2	Traditional manufacturing technologies and firing techniques.	C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	2.3	Variations in composition across cultures and historical periods.	K1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
3 The factors that affect the deterioration of archaeological glass & pottery	3.1	Chemical and physical deterioration mechanisms.	K2	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	3.2	Environmental factors causing decay (moisture, salts, temperature).	S1,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	3.3	Human-induced deterioration in storage, excavation, and display.	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
4 Examination of archaeological glass & pottery	4.1	Visual and microscopic examination techniques.	K1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	4.2	Analytical methods (FTIR, XRF, SEM-EDS).	C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	

	4.3	Condition assessment and documentation of damage patterns.	K1,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
5 Cleaning of archaeological glass & pottery	5.1	Dry cleaning techniques and mechanical removal of deposits.	C1,S2	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	5.2	Wet cleaning approaches and chemical considerations.	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	5.3	Risks, limitations, and decision-making for cleaning procedures	C1,K2	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
6 Reconstruction of archaeological pottery (Joining & gap filling)	6.1	Adhesives used in pottery joining and their selection criteria.	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	6.2	Techniques for aligning and assembling pottery fragments	K1,K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	6.3	Gap filling materials, modeling, and surface finishing.	C1,S2	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
7 Reconstruction of archaeological glass (Joining & gap filling)	7.1	Special challenges in glass joining (transparency, fragility)	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	7.2	Reversible adhesives and bonding	S1,C1	Face to face			• Interactive lectures • Presentations • Group-Based	

		systems for glass.					• Learning Discussion
	7.3	Techniques for gap filling, tinting, and visual integration.	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
8 Active and passive stabilization for archaeological glass & pottery	8.1	Passive stabilization: environmental control and storage	S1,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
	8.2	Active stabilization: chemical treatments and consolidation	S1,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
	8.3	Long-term monitoring and preventive conservation strategies	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
9 Conservation & restoration of archaeological pottery in situ	9.1	Challenges of stabilizing pottery during excavation.	S1,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
	9.2	Field consolidation techniques for fragile finds.	K2,S1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
	9.3	Temporary supports and safe transport methods	C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion
10 Documentation of conservation & restoration of	10.1	Written documentation standards and terminology		Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion

archaeological glass & pottery			K1, K2, S1,S2,C1					
	10.2	Photographic and graphical documentation.	K1, K2, S1,S2,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
	10.3	Reporting restoration steps, materials, and outcomes	K1, K2, S1,S2,C1	Face to face			• Interactive lectures • Presentations • Group-Based • Learning Discussion	
11	11.1	Practical training for conserving & restoring modern glass & pottery fragments	K1, K2, S1,S2,C1	Face to face			• Report • Team work • Skills	
	11.2							
	11.3							
12	12.1							
	12.2							
	12.3							
13	13.1							
	13.2							
	13.3							
14	14.1							
	14.2							
	14.3							
15	15.1	Discussing the resulted reports	K1, K2, S1,S2,C1	Face to face			• Report Presentation skills	
	15.2						• Report Presentation skills	
	15.3						• Report Presentation skills	

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	S1	S2	C1
First Exam	30	X	X	X		
Second Exam –If any						
Final Exam	50	X	X	X	X	X
**Class work						
Projects/reports	10	X	X	X	X	X
Research working papers	5	X	X	X	X	X
Field visits						
Practical and clinical						
Performance Completion file						
Presentation/ exhibition	5	X	X	X	X	X
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	4	2	1	10	30	4	10%	K1
										K2
			X			1	30	1	10%	S1
							30	1	10%	S2
	X	X					30	1	10%	C2

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					
				X	X	2	50	1		K1
	X				X	2		1		K2
			X		X	1		2		S1
	X					1		1		S2
		X				1		3		C2

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:

B- Absences from exams and submitting assignments on time:

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

E- Grading policy:

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

28. References:

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

Conservation and Restoration of Ceramics
Conservation and Care of Glass Objects

B- Recommended books, materials, and media:

- MDPI Editorial Team (El Ouahabi, M.). (2025). Different Cleaning Techniques for Archeological Ceramics. Heritage, 8(10), 434 — A recent comprehensive review on traditional and advanced cleaning methods for archaeological ceramics and pottery.
- Journal of Cultural Heritage Editorial Board. (2025). Journal of Cultural Heritage, Vol. 73. Elsevier — Includes studies on experimental cleaning and restoration methods for glass and ceramic artefacts.
- Journal of Cultural Heritage Editorial Board. (2024). Journal of Cultural Heritage, Vol. 66. Elsevier — Case studies on ceramic analysis and conservation materials.
- Caple, C., & Garlick, V. (2021). Studies in Archaeological Conservation. Routledge — Contains several archaeological glass and pottery conservation case studies illustrating modern field and lab practices.
- PyPotteryLens Project (Cardarelli, L.). (2024). PyPotteryLens: An Open-Source Deep Learning Framework for Automated Digitisation of Archaeological Pottery Documentation (preprint) — Highlights innovative digital tools for documentation that support conservation practice.

29. Additional information:

Name of the Instructor or the Course Coordinator: Signature: Date:
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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:
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