1	**Course title**	**Archaeological Information System**
2	**Course number**	2602301
3	**Credit hours (theory, practical)**	3 (theoretical:2; practical 1)
	Contact hours (theory, practical)	3 (theoretical)
4	**Prerequisites/corequisites**	Not applicable
5	**Program title**	Bachelor's degree in Cultural Resources management and Conservation
6	**Program code**	02
7	**Awarding institution**	The University of Jordan
8	**School**	Archaeology and Tourism
9	**Department**	Cultural Resources management and Conservation
10	**Level of course**	2nd year
11	**Year of study and semester (s)**	Every year/ first semester
12	**Final Qualification**	Bachelor's degree
13	**Other department (s) involved in teaching the course**	Not applicable
14	**Language of Instruction**	Arabic, with systematic use of related English terminology
15	**Date of production/revision**	2015

16. Course Coordinator:

Course Coordinator: **Dr. Fuad Hourani**
Office number: /
Office hours: Sunday Tuesday & Thursday: **13-14**; Monday & Wednesday: **12:30-14**
Phone number: **25046**
Email address: **f.hourani@ju.edu.jo**

17. Other instructors:

Not applicable

18. Course Description:

This Course introduces the methods and techniques used in the "Archaeological Information system", such as Geographical Information System (GIS), remote sensing, mapping, computer-aided-drafting, measuring, surveying and landscape and architectural modeling. The course includes practical application in the lab.

19. Course aims and outcomes:

A- Aims:

1. To develop student perception of the space and orientability.
2. To build student capacity in reading and creating maps.
3. To improve student capacity for the effective use of measuring, drawing and modeling techniques.
4. To emphasize the fundamentals of satellite, aerial and ground-based remote sensing methods and technologies.
5. To provide best practices for collecting and documenting spatially-related data on archaeological and cultural and natural heritage sites.
6. To introduce archaeological applications of GIS and data management technologies.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to

1- Demonstrate a solid understanding of the notions of space and orientability.
2- Read different generic and thematic map types.
3- Reveal a keen awareness of the techniques used to acquire spatial data.
4- Use the appropriate methods and tools of measuring, positioning and drawing.
5- Compile, analyse, interpret and appropriately communicate spatial resources of archaeological and heritage data.
6- Utilise GIS and data base systems for managing archaeological and other cultural and natural resources.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
General framework: Concepts, definitions, basic principles and uses of Archaeological Information System.	1	Dr. Fuad Hourani	Correspond to the above-mentioned ILOs 1	Written exams & individual or group presentations	See section 25
The space: its notion, definitions and theories.	2				
Coordinate systems & Global Positioning System	3				
Maps and Cartography	4+5		Correspond to ILOs 2		

Satellite remote sensing.	6		Correspond to ILOs 3			
Areal remote sensing.	7					
Ground-based remote sensing.	8					
Measuring and drafting	9		Correspond to ILOs 4			
Landscape and architectural modeling.	10+11					
Data base systems	12		Correspond to ILOs 5&6			
Geographic Information System	13-14					

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

1- Lectures
2- Practical examples on PowerPoint presentations
3- Practical work in the computer lab.
4- Group discussions
5- Visit(s) to one or more specialized laboratory(ies).

22. Evaluation Methods and Course Requirements:

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

- Written exams
- Presentations given by students
- Discussions

23. Course Policies:

A- Attendance policies: As per University rules.

B- Absences from exams and handing in assignments on time: As per University rules.

C- Health and safety procedures: As per University rules.

D- Honesty policy regarding cheating, plagiarism, misbehaviour: As per University rules.

- E- Grading policy: Midterm Exam: 30%
- Individual/Group presentations: 20%
- Participation in class discussions: 10%
- Final exam: 40%

F- Available university services that support achievement in the course:
- JU Library
- Faculty computer lab.

24. Required equipment: (Facilities, Tools, Labs, Training….)

- Computer lab.: Training on GIS and other data management applications
- Training on Total Station and GPS

25. References:

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

Recommended books, materials, and media:

1- Conolly, J. and Lake, M. 2006. Geographical Information Systems in Archaeology. Cambridge University Press: Cambridge.
2- Wheatley, D. and M. Gillings. 2002. Spatial Technology and Archaeology. London: Taylor and Francis.
3- Burrough, P.A. and McDonnell, R.A. 1998 Principles of Geographic Informations Systems, Oxford: Oxford University Press.
4- Mishra R.P. 2014. Fundamentals of Cartography, Concept Publishing Co.
5- Pickles J. (2003) A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World, Taylor & Francis.
6- Bon A. Dewitt and Paul R. Wolf. 2011. Elements of Photogrammetry: With Applications in GIS. McGraw-Hill

26. Additional information:

Name of Course Coordinator: Dr. Fuad Hourani ---------Signature: ---------- Date: 2019/2/18

Head of curriculum committee/Department: ---------- Signature: ----------

Head of Department: ---------- Signature: ----------

Head of curriculum committee/Faculty: ---------- Signature: ----------

Dean: ---------- -Signature: ----------