

Archaeological Prospection and Visualisation

Module Code:	ARC7044-B
Academic Year:	2019-20
Credit Rating:	20
School:	School of Archaeological and Forensic Sciences
Subject Area:	Archaeology
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	22
Tutorials	4
Laboratory	24
Directed Study	150

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims

The aim of this module is to introduce and detail digital methods used in modern archaeological practices for visualisation and prospection at a range of scales from the kilometre to the nanometre. These include use of satellite data, aerial photography, geophysics, 3D scanning; and with this will detail methods of acquisition, data evaluation, and presentation to provide a comprehensive summary of modern visualisation and prospection techniques.

Outline Syllabus

The syllabus will cover a wide range of methods and technologies common in modern archaeological practice. This is introduced through traditional methods of prospection and recording, but moves swiftly in to: use of geophysical survey, electrical methods of remote sensing, marine geophysics, underwater/wetland prospecting and recording, photography and photogrammetry, 3D scanning (to include structured light scanning, and laser scanning), macro-photography and microscopy including 3d recording techniques at fine scales, post-processing, interpretation and analysis techniques (including use of citizen science) and presentation of data from a wide range of visualisation softwares.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Exhibit knowledge and understanding of the origins and development of the disciplines of visualisation and prospection.
- 2 Understand the principles, operational requirements and appropriate applications of a range of instrumental analytical techniques relevant to prospection, visualisation and object recording.
- 3 Critically review the principles and appropriate applications of key scientific approaches employed in Archaeological visualisation and prospection.
- 4 Practise core fieldwork techniques of recording and developing a prospection strategy in a safe and effective manner.

Learning, Teaching and Assessment Strategy

Formal lectures introduce and explore concepts, principles and theories and these are demonstrated in laboratory/practical. Practical skills are developed in laboratory, field, and computing sessions. Cognitive and personal skills are developed in open-ended problem solving exercises, tackled by working in small groups supported by members of academic staff during laboratory, field, and computing sessions. Oral feedback is given during such sessions. Formative written assessment with feedback is used throughout the module allowing you to review and revise your learning. A summative written assessment is used to examine your understanding of the application of practical skills to the knowledge base of the module. Directed study time is available for you to: prepare for lectures and tutorials by accessing the directed reading material; engage in work with your teams in preparing problem-based exercises; undertake on-going review and revision of lecture and tutorial sessions; prepare for and reflect on the outcome of the formative and summative assessments.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	Poster	0-1000 words	20%	No

Summative	Coursework	Essay	0-3000 words	80%	Yes
Formative	Coursework	Critique	0-500 words	%	No

Legacy Code (if applicable)

Reading List

To view Reading List, please go to [rebus:list](#).