Module Details

Module Title	Archaeological Prospection and Visualisation
Module Code	ARC7044-B
Academic Year	2024/5
Credits	20
School	School of Archaeological and Forensic Sciences
FHEQ Level	FHEQ Level 7

Contact Hours

Type	Hours
Directed Study	150
Lectures	10
Seminars	10
Tutorials	5
Practical Classes or Workshops	25

Availability

Occurrence	Location / Period
BDA	University of Bradford / Semester 1

Module Aims

The aim of this module is to introduce and detail digital methods used in modern archaeological practices for visualisation and analysis in field and lab settings, at a range of scales from the kilometre to the nanometre. These include use of 3D scanning (objects and landscapes), satellite data, aerial photography; presentation in the computing and mobile environments (including VR and AR), and the use of 3d printing. It will detail methods of acquisition, data evaluation, and presentation to provide a comprehensive summary of modern visualisation and prospection techniques.

Outline Syllabus

Photography, Photogrammetry, Structured-Light Scanning, Terrestrial Laser Scanning, Drone flying and imaging, Mobile Mapping, Data Cleaning, Optimisation and digital Presentation, 3d printing.

Learning Outcomes

Outcome Number	Description
01	Exhibit knowledge and understanding of the origins and development of the disciplines of visualisation and and heritage settings..
02	Understand the principles, operational requirements and appropriate applications of a range of instrumental analytical techniques relevant to visualisation, object recording, and analysis.
03	Critically review the principles and appropriate applications of key scientific approaches employed in Archaeological and heritage visualisation.
04	Practise core fieldwork techniques of recording and developing a digital documentation 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	Weighting
Summative	Coursework - Written	Poster (1000 words)	20%
Summative	Coursework - Written	Project briefing (3000 words)	80%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.