ARCL0011 FIELD METHODS & TECHNIQUES
2023–24, Term 2

Year 1 Core module
15 credits

Excavating the great hall at Rendlesham (Sf), August 2022

Co-ordinator: Dr Stuart Brookes. Email: s.brookes@ucl.ac.uk
Office: 411. Office hours: **Tues, 14.00–16.00.**

IMPORTANT INFORMATION REGARDING ASSESSMENTS:

The **coursework coversheet** is available on the course Moodle pages and here: https://www.ucl.ac.uk/archaeology/current-students under "Policies, Forms and Guidelines".

Please enter **your five-digit candidate code on the coversheet and *in the subject line*** when you upload your work in Moodle.

Please use **your five-digit candidate code as the name of the file** you submit.

Please refer to https://www.ucl.ac.uk/archaeology/current-students/ioa-student-handbook/13-information-assessment
https://www.ucl.ac.uk/archaeology/current-students/ioa-study-skills-guide/referencing-effectively-and-ioa-guidelines
https://www.ucl.ac.uk/students/exams-and-assessments/academic-integrity
https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-AI
for instructions on coursework submission, IoA referencing guidelines and marking criteria, as well as UCL policies on penalties for late submission, over-length work, the use of text generation software (AI) and academic misconduct.

MODULE OVERVIEW

Module description

This first-year core module runs in Term 2, and provides a grounding in basic concepts and methodology and techniques of analysis relating to archaeological evidence. The module is taught through lectures and small group practical seminars, leading to a fieldwork training course. The teaching will culminate in two weeks' of field training in summer 2024, where students will undertake a broad range of the archaeological excavation, recording and survey techniques previously discussed.

Module Aims

The aims of this module are to provide students with a broad understanding of archaeological field techniques and methods: it highlights the aims and limitations of these techniques and demonstrates their use in a variety of different archaeological scenarios. The course will provide taught and practical training in desk-top and field survey techniques; excavation; the uses and application of paper and electronic resources, including archival material, together with mapping and GIS data. Students are also taught about the implications and responsibilities arising from invasive excavation techniques, and the necessity for the publication and dissemination of the ensuing results.

Learning Outcomes

1. To give the students the degree of competency and confidence to enable them to participate in fieldwork, across the globe, and in any time period, whether research or commercial projects.
2. To raise awareness of the methodological issues surrounding archaeological survey and fieldwork.
3. To critically consider the process of designing and managing a project from initial survey to the final publication.
4. Develop the student's group working skills.
5. Expand and improve basic observation and recording skills.
6. Emphasise and develop the many transferable and key skills that are implicit in the execution of fieldwork and its subsequent, analysis and publication stages.

Application of the learning outcomes

Subject knowledge, understanding and skills. To:-
   a) demonstrate a good understanding of the principles and methods by which archaeological data are acquired and analysed.
   b) demonstrate a range of practical experience of the recovery of primary archaeological data and associated post-excavation methods.
   c) show an awareness of the issues involved in planning, designing, and executing a programme of field, laboratory or museum-based study.

Generic skills. To:-
   a) work as a participant or leader of a team, contributing effectively to decision making and the achievement of objectives.
   b) demonstrate visual skills in recognising and describing material remains, and recognising anomalies.
   c) understand the importance of health and safety in the work environment.

Methods of Assessment

Assessment 1 (Maps and aerial photograph work sheet) 25% (Due date: Groups 1– 3: 9 Feb 24; Groups 4–6: 16 Feb 24).

Assessment 2 (Essay) 40%. Due date: 22 Mar 24. Word Count: 1500 words

Assessment 3 (Stratigraphy and Spreadsheet work sheets) 35%. Due date: 26 Apr 2024

Communications

- **Moodle is the main hub** for this course.
- Important information will be posted by staff in the **Announcements section of the Moodle page** and you will automatically receive an email notification for these.
- Please post any general queries relating to module content, assessments and administration in Moodle Forum or via email. The forum will be checked regularly.
- For personal queries, please contact the co-ordinator by email.

Week-by-week summary

Week	Date	Topic	Time, Venue
1	11 Jan 24	**Lecture 1: Archaeological Field Methods: an introduction**	9.00–10.00, Torrington Place (1-19) G13
1	11 Jan 24	Practical 1: Maps and map reading (Group 1)	10.00–11.00, 410
1	11 Jan 24	Practical 1: Maps and map reading (Group 2)	11.00–12.00, 410
2	11 Jan 24	Practical 1: Maps and map reading (Group 3)	12.00–13.00, 410
2	18 Jan 24	**Lecture 2: Locating Archaeological Sites**	9.00–10.00, Torrington Place (1-19) G13
2	18 Jan 24	Practical 1: Maps and map reading (Group 4)	10.00–11.00, 410
2	18 Jan 24	Practical 1: Maps and map reading (Group 5)	11.00–12.00, 410
3	18 Jan 24	Practical 1: Maps and map reading (Group 6)	12.00–13.00, 410
3	25 Jan 24	**Lecture 3: Geophysical survey in archaeology (KL)**	9.00–10.00, Torrington Place (1-19) G13
3	25 Jan 24	Practical 2: Working with online resources (Group 1)	10.00–11.00, 410
3	25 Jan 24	Practical 2: Working with online resources (Group 2)	11.00–12.00, 410
4	25 Jan 24	Practical 2: Working with online resources (Group 3)	12.00–13.00, 410
4	1 Feb 24	**Lecture 4: Excavating archaeological sites–general principles (PM)**	9.00–10.00, Torrington Place (1-19) G13
4	1 Feb 24	Practical 2: Working with online resources (Group 4)	10.00–11.00, 410
4	1 Feb 24	Practical 2: Working with online resources (Group 5)	11.00–12.00, 410
5	1 Feb 24	Practical 2: Working with online resources (Group 6)	12.00–13.00, 410
5	8 Feb 24	**Lecture 5: Excavating and recording archaeological sites**	9.00–10.00, Torrington Place (1-19) G13
5	8 Feb 24	Practical 3: Designing an excavation (Group 1)	10.00–11.00, 410
5	8 Feb 24	Practical 3: Designing an excavation (Group 2)	11.00–12.00, 410
7	22 Feb 24	Practical 3: Designing an excavation (Group 3)	12.00–13.00, 410
6	15 Feb 24	**READING WEEK**	
7	22 Feb 24	**Lecture 7: Field Survey & Geographical Information Systems (GIS)**	9.00–10.00, Torrington Place (1-19) G13
7	22 Feb 24	Practical 3: Designing an excavation (Group 4)	10.00–11.00, 410
7	22 Feb 24	Practical 3: Designing an excavation (Group 5)	11.00–12.00, 410
8	22 Feb 24	Practical 3: Designing an excavation (Group 6)	12.00–13.00, 410
8	29 Feb 24	**Lecture 8: Standing buildings archaeology**	9.00–10.00, Torrington Place (1-19) G13
8	29 Feb 24	Practical 4: Using computers in pre-excavation planning (Grp 1)	10.00–11.00, 410
8	29 Feb 24	Practical 4: Using computers in pre-excavation planning (Grp 2)	11.00–12.00, 410
9	29 Feb 24	Practical 4: Using computers in pre-excavation planning (Grp 3)	12.00–13.00, 410
9	7 Mar 24	**Lecture 9: Environmental Archaeology sampling and chronological resolution. (DF)**	9.00–10.00, Torrington Place (1-19) G13
9	7 Mar 24	Practical 4: Using computers in pre-excavation planning (Grp 4)	10.00–11.00, 410
9	7 Mar 24	Practical 4: Using computers in pre-excavation planning (Grp 5)	11.00–12.00, 410

10	7 Mar 24	Practical 4: Using computers in pre-excavation planning (Grp 6)	12.00–13.00, 410
10	14 Mar 24	**Lecture 10: Commercial archaeology (SW)**	9.00–10.00, Torrington Place (1-19) G13
10	14 Mar 24	Practical 5: Harris Matrix (Groups 1)	10.00–11.00, 410
10	14 Mar 24	Practical 5: Harris Matrix (Groups 2)	11.00–12.00, 410
11	14 Mar 24	Practical 5: Harris Matrix (Group 3)	12.00–13.00, 410
11	21 Mar 24	**Lecture 11: Post-excavation (SK and RC)**	9.00–10.00, Torrington Place (1-19) G13
11	21 Mar 24	Practical 5: Harris Matrix (Group 4)	10.00–11.00, 410
11	21 Mar 24	Practical 5: Harris Matrix (Group 5)	11.00–12.00, 410
11	21 Mar 24	Practical 5: Harris Matrix (Group 6)	12.00–13.00, 410

Lecturers (or other contributors)

KL: Kris Lockyear; PM: Paul Mason (ASE Sussex Fieldwork Project Manager); DF: Dorian Fuller; SW: Stephen White (ASE London Senior Archaeologist); SK: Samara King (ASE Sussex Post-Excavation Project Manager); RC: Rob Cullum (ASE Sussex Post-Excavation Project Manager

Weekly Module Plan

The module is taught through lectures and practicals. Students will be required to undertake set readings and complete pre-class activities of case study material in order to be able to actively participate in the discussion.

1. Weekly **lectures** for all students take place **Thurs 9.00–10.00, Torrington Place (1-19) G13**
2. **Practicals** take place once every two weeks at different times and locations in the **UCL IoA (rm 410)**. A list of Groups will be published on Moodle. Please take note of the relevant practical slot listed in the **week-by-week summary** above.

Workload

This is a 15-credit module which equates to 150 hours of learning time including session preparation, background reading, and researching and writing your assignments. With that in mind you should expect to organise your time in roughly this way:

20 hours	*Staff-led teaching sessions (lectures, seminars, tutorials, discussion-board sessions)*
60 hours	*Self-guided session preparation (reading, listening, note-taking and online activities), about 6 hours a week*
15 hours	*Reading for, and answering Assessment 1 work sheet*
15 hours	*Reading for, and answering Assessment 3 Stratigraphy and Spreadsheet work sheets*
40 hours	*Reading for, and writing, the Assessment 2 research essay*

1.   ASSESSMENT

Each assignment and possible approaches to it will be discussed in class, in advance of the submission deadline. If students are unclear about the nature of an assignment, they should discuss this with the module co-ordinator in advance (via office hours or class Moodle forum). You will receive feedback on your written coursework via Moodle, and have the opportunity to discuss your marks and feedback with the co-ordinator in their office hours.

For more details see the 'Assessment' section on Moodle. The IoA marking criteria can be found in the IoA Student Handbook (Section 13: Information on assessment). The IoA Study Skills Guide provides useful guidance on writing different types of assignment.
Please note that **late submission, exceeding the maximum word count** and **academic misconduct (plagiarism)** will be penalized and can significantly reduce the mark awarded for the assignment and/or overall module result. On requirements, please do consult

https://www.ucl.ac.uk/archaeology/current-students/ioa-student-handbook/13-information-assessment with sections 13.7–13.8: coursework submission, 13.10: word count, 13.12–14: academic integrity.

Assessment 1 (Maps and aerial photograph work sheet) 25%
Due date: Groups 1– 3: **9 Feb 2024**; Groups 4–6: **16 Feb 2024**
The assignment will be given out during the practical classes 1–2. Basic reading for those sessions is listed under Syllabus, below. Further instruction on completion of the task will be discussed in practical classes 1–2.

Assessment 2 (Essay) 40%. Due date: 22 Mar 2024. Word Count: 1500 words

Write a 1500-word essay on ONE of the following:
1. What does LiDAR add to the value of remote sensing?
2. Why and how are research designs used by archaeologists in planning and carrying out excavations?
3. You are designing a survey project to look at the development of a landscape from the Neolithic to the early middle ages on an area of chalk downland in southern England. Discuss the design of your survey. What might it include? How might it be integrated? What might be the problems?
4. What does the Harris matrix contribute to archaeological recording and interpretation?
5. What issues would you have to consider when planning an excavation of a deeply stratified urban site. How would these differ from excavating a shallow rural site on chalk?
6. Choose two publications relating to a similar/comparable type of excavation or field project (e.g., the excavation publications of two Neolithic burial mounds, or two Roman villas, or two landscape surveys) and write an essay which discusses the various ways in which each report uses text, imagery, format/layout, and specialist reports to present the information, and the effectiveness of this for each report. Choose two publications which are available in the Institute of Archaeology library. Write up your analysis in such a way that it is understandable to the marker without them necessarily having access to the two publications concerned: to facilitate this you can include in your essay up to a maximum of six A4 pages made up of photocopies from your chosen reports – to provide examples of styles of text, layout and imagery which characterise your chosen reports.

Assessment 3 (Stratigraphy and Spreadsheet work sheets) 35%. Due date: 26 Apr 2024
Assessment 3 comprises two elements:
1. Element 1 directly relates to the tasks performed in your computing practical (Practical 4). You should submit two pieces of work:
    i. your completed Excel Workbook, gaz[your initials].xls;
    ii. all your comments on the tasks, which should not total more than one side A4 paper.
These will be given equal weight in the assessment. You will be assessed on accuracy, your grasp of the computing principles involved, and the strength of your archaeological arguments.

2. You will need to complete and hand-in the stratigraphy worksheet that you were working on in Practical 5. You should complete the matrix and answer all the questions on the sheet provided.

2. RESOURCES AND PREPARATION FOR CLASS

Preparation for class

You are expected to read the **1–3 Essential Readings** as well as completing any **online activities on Moodle** each week. Completing the readings is essential for your effective participation in the activities and discussions that we will do, and it will greatly enhance your understanding of the

material covered. **Further readings are provided via the Online Reading List** for you to get a sense of the range of current work on a given topic and for you to draw upon for your assessments. The online reading list is accessible through the Moodle page of the module, or directly here: https://ucl.rl.talis.com/modules/arcl0011.html

Recommended basic texts and online resources

The principal texts are Renfrew and Bahn (2020) and Carver (2009), multiple copies of which are available in the library. A newly revised textbook that I particularly recommend is *Principles of Archaeology* by Price and Knudson (2018), which contains a thoroughly modern view of the discipline. Carver and Price and Knudson are available as E-books

Banning, E. B. 2020. *The Archaeologist's Laboratory: The Analysis of Archaeological Evidence.* London: Kluwer. Revised edition. E-book: https://link-springer-com.libproxy.ucl.ac.uk/book/10.1007%2F978-3-030-47992-3

Barker, P.A. 1993. *Techniques of Archaeological Excavation*. London: Batsford (3rd Edition). E-book

*Carver, M. 2009. *Archaeological Investigation.* London: Routledge. ISSUE DESK IOA CAR 6 & INST ARCH AL 10 CAR 6. E-book

*Drewett, P.L. 2011. *Field Archaeology: an introduction*. (2nd Edition) Oxford: Routledge. ISSUE DESK IOA DRE 2 & INST ARCH AL 10 DRE. E-book

Fagan B. and Durrani, N., 2020. *Bigger than history: why archaeology matters*. London: Thames and Hudson.

McIntosh, J. 1999. *The practical archaeologist: how we know what we know about the past*. London: Thames and Hudson. 2nd revised edition. INST ARCH AH MCI.

Morrison, W., Thomas, R. and Gosden, C. 2014. Laying Bare the Landscape: commercial archaeology and the potential of digital spatial data. *Internet Archaeology*. E-book http://dx.doi.org/10.11141/ia.36.9

*Price, T.D. and Knudson, K. 2018. *Principles of Archaeology*. London: Thames and Hudson. E-book

*Renfrew, C. and Bahn, P. 2020. *Archaeology, Theories, Methods, and Practice*. London: Thames and Hudson. (8th edition). ISSUE DESK INST ARCH AH REN & INST ARCH AH REN. E-book

N.B. There is a very important resource for technical papers and guides that relate to specific subjects such as survey, environmental archaeology and project management (especially important for your essay), available from Historic England as downloadable pdfs at:-

https://historicengland.org.uk/advice/technical-advice/

I strongly recommend that you browse through the titles and save any that are of relevant to your assignments and interests. These volumes pertain to all of the following lectures and practicals.

3. SYLLABUS

Lecture 1. 11/1/24. Archaeological field methods: an introduction
The lecture runs through all the topics to be covered in the course and constitutes an informal introduction to its contents and aims. The lecture also covers the structure of the course in terms of the practical work to be undertaken during seminars, together with the required coursework, submissions dates and procedures. In this course, especial emphasis is placed on research-led teaching, this means applying the methods and techniques taught in the course back to the specific object of this year's field course(s).

Essential Reading:
Banning, E. B. 2020. *The Archaeologist's Laboratory: The Analysis of Archaeological Evidence.* London: Kluwer. Revised edition. **Part I.2. What are Data? Measurements and Errors** E-book https://link-springer-com.libproxy.ucl.ac.uk/book/10.1007%2F978-3-030-47992-3

Drewett, P.L. 2011. *Field Archaeology: an introduction*. (2nd Edition) Oxford: Routledge. **CHAPTER 1. Introduction.** ISSUE DESK IOA DRE 2 & INST ARCH AL 10 DRE E-book

Recommended reading:
Barker, X P. A., 1993. *Techniques of Archaeological Excavation*, **CHAPTER 2**. London: Batsford (3rd Edition). E-book
Renfrew, C. and Bahn, P. 2020. *Archaeology, Theories, Methods, and Practice*. London: Thames and Hudson. (8th edition). **CHAPTER 1.** ISSUE DESK INST ARCH AH REN & INST ARCH AH REN. E-book

Practical 1. 11 & 18/1/24. Maps and map reading

The aim of this practical is to introduce students to different types of maps used by archaeologists. We will consider how to orientate the map, the different scales of maps, understanding symbology (including grid lines and referencing system), eastings and northings, and how contours work.

Essential Reading:

Ordnance Survey 2013. *Map Reading: from the beginner to the advanced map reader*. Available on-line at https://www.ordnancesurvey.co.uk/docs/leaflets/map-reading.pdf or from the Moodle site.

Lecture 2. 18/1/24. Locating archaeological sites

Archaeological sites are to be found both beneath our feet and all around us. Many sites are extant and visible in the modern landscape: some continue their original function into the present day, whereas others might now be used for a purpose unintended and unimagined by their constructors. There are also sites whose landscape setting has completely changed due to a combination of topographic and environmental change; these might be now buried by substantial depths of sediment or perhaps been overtaken by marine transgression.

It is axiomatic that sites and landscapes are preserved in many differing states dependent upon the taphonomic processes operating over time; in addition to natural taphonomic processes, the actions of successive generations of humans in the landscape must also be considered. Archaeologists have to be able to recognise and interpret sites at these many preservation levels. Similarly, project planning, the type and scale of interventions, survey and sampling, will all be facilitated by understanding the landscape type and history, together with the past and present physical and biological processes and conditions that could affect a site and its associated archaeological material.

Aerial photography constitutes one of the key tools in the identification of archaeological sites. The principles behind its methods and applications are given in your key texts and in more detail below. Key elements that reveal sites are crop marks, shadow marks, and parch marks but there are many further nuances of these main categories which are shown in the lecture. Today the technology also exists to see sites and topography where the ground surface is covered by woodland; this technique is known as LiDAR (Light Detection and Ranging) and has been used to locate archaeological sites, with great success, in both Britain and other parts of the world. On a larger scale remote sensing from satellites has produced detailed LANDSAT images that are of immense use to archaeologists working on a landscape and regional scale, especially in otherwise inaccessible areas.

Essential Reading:
Carver, M. 2009. *Archaeological Investigation.* London: Routledge. **CHAPTER 4 Landscape Survey** ISSUE DESK IOA CAR 6 & INST ARCH AL 10 CAR 6. E-book
Drewett, P.L. 2011. *Field Archaeology: an introduction*. (2nd Edition) Oxford: Routledge. **CHAPTER 3. Finding archaeological sites.** ISSUE DESK IOA DRE 2 & INST ARCH AL 10 DRE E-book

Recommended reading:

Brown, A., 1987. Fieldwork for Archaeologists and Local Historians, London, Batsford. (Chapter 2). INST ARCH AL BRO

Renfrew, C. and Bahn, P. 2020. *Archaeology, Theories, Methods, and Practice*. London: Thames and Hudson. (8th edition). **pp. 79–91** ISSUE DESK INST ARCH AH REN & INST ARCH AH REN E-book

Riley, D.N. 1987. *Air Photography and Archaeology.* London: Duckworth. INST ARCH AL 21 QTO RIL.

Riley, D.N. 1996. *Aerial Archaeology in Britain.* Princes Risborough: Shire. ISSUE DESK INST ARCH AL 21 RIL.

Scollar, I., Tabbagh, A., Hesse, A. and Herzog, I. 1990. *Archaeological Prospecting and Remote Sensing.* Cambridge: CUP. (Latest edition CUP 2009).

Tilley, C. 2004. Round Barrows and Dykes as landscape Metaphors. *Cambridge Archaeological Journal* 14 (2), 185-203 E-resource

Wilson, D.R. 1975. *Aerial reconnaissance for archaeology*. London: CBA Research Report 12. INST ARCH DAA QTO SERIES COU 12. Scan 'Soil and crop marks in the recognition of archaeological sites by air photography' by R. J. A. Jones and R. Evans E-book

Wilson, D.R. 1982. *Air Photo Interpretation for Archaeologists*. London: Batsford. ISSUE DESK INST ARCH WIL 12; see also 3rd edition by Tempus Publishing (2000) INST ARCH AL21 WIL.

Lecture 3: 25/1/24. Geophysical survey in archaeology

Geophysical survey in archaeology is one way of investigating what is below the ground surface without damaging it. By measuring some property of the deposits and mapping those readings, the aim is to produce a plan or map of the buried archaeology.   Originally used at a site scale and as a precursor to excavation, geophysical survey is now often seen as an alternative to excavation, and can be used at a landscape scale. This lecture will introduce the subject, and then discuss the three main survey techniques used in archaeology: Magnetic Gradiometry, Earth Resistance survey, and Ground Penetrating Radar.

Essential Reading:

The page *Geophysical Survey in Archaeology* (https://hertsgeosurvey.wordpress.com/geophysical-survey-in-archaeology/) provides a good overview of the methods, and the main site (https://hertsgeosurvey.wordpress.com) provides many examples of surveys and discussions of the results.

Carver, M. 2009. *Archaeological Investigation.* London: Routledge. **CHAPTER 5 Site Survey** ISSUE DESK IOA CAR 6 & INST ARCH AL 10 CAR 6. E-book

Renfrew, C. and Bahn, P. 2020. *Archaeology, Theories, Methods, and Practice*. London: Thames and Hudson. (7th edition). pp. 103–109 ISSUE DESK INST ARCH AH REN & INST ARCH AH REN E-book

Recommended reading:

Clark, A. 1996. *Seeing Beneath the Soil: Prospecting Methods in Archaeology*. London: Batsford. ISSUE DESK INST ARCH AL 13 CLA. E-book

David, A. 1995. *Geophysical Survey in Archaeological Field Evaluation*. London: English Heritage. INST ARCH AL 12 QTO DAV E-book

*Gaffney, C. And Gator, J. 2003. *Revealing the Buried Past. Geophysics for Archaeologists*. Stroud: Tempus. INST ARCH AL 12 GAF. (The best introduction to modern archaeological geophysics, but only available as a book).

Gaffney, C., Gator, J. and Ovenden S. 2002. *The use of Geophysical Techniques in Archaeological Field Evaluations*. IFA Paper No. 6. Reading: Institute of Field Archaeologists. (Quite a thin pamphlet.).

Johnson, J.K. (ed.) 2006. *Remote sensing in archaeology: an explicitly North American perspective*. Tuscaloosa: University of Alabama Press. I NST ARCH AL 13 JOH. (Excellent and very useful book, and not just for North America.)

Schmidt, A., Linford, P., David, A., Gaffney, C., Apostolos, S. and Fassbinder, J., 2016. EAC Guidelines for the use of Geophysics in Archaeology: Questions to Ask and Points to Consider. EAC Guidelines 2 http://old.european-archaeological-council.org/files/eac_guidelines_2_final.pdf E-book

If you would like to follow up this topic have a look at the journal *Archaeological Prospection*. Available online from volume 54, number 1.

Practical 2: 25/1/24 & 1/2/24. Working with online resources

<u>NOTE: Laptop or tablet required</u>

In any given area, past find spots and sites are contained within the Historic Environment Record of local authorities, these records are in some instances further supported by data held by the national statutory bodies such as Historic England, the Royal Commission, the National Archives, etc. From these organisations the prospective excavator can gain access to scheduling data, maps and plans, a description of the site types mentioned, and a bibliography of past investigation history. More mapping information is available through Edina Digimap, where it is possible to view and download maps and map data, including different scale Ordnance Survey (OS) maps, old versions of maps, geological and marine maps. In this practical we will introduce some of the resources available online.

Lecture 4: 1/2/24. Excavating archaeological sites – general principles

The excavation of archaeological sites can be initiated as a research project, as a pre-cursor to development or as part of a community initiative; sometimes a combination of all three factors. In each instance careful preparation is required prior to fieldwork starting to establish the archaeological potential of the site, the research aims of the project and familiarisation with physical factors that may affect the scope of the investigation. Budgetary and time constraints can also be important considerations. Once this information has been gathered, a project design can be formulated which includes methodologies tailored to the type of archaeology anticipated and prevailing site conditions. Further forethought is required to address health and safety issues and logistical arrangements in preparation for setting the site up for excavation.

This lecture will present key aspects of pre-commencement planning and site set-up together with an overview of practical techniques used on contemporary archaeological excavations. It will look at the array of recording systems used by archaeologists, including the use of GPS and drone technology. Aspects of legislation will also be touched upon, including the procedure governing the exhumation of human remains and Treasure Trove.

<u>Essential Reading:</u>
CIfA, 2020 (Revised Ed.), *Standards and Guidance for Archaeological Excavation.* CIfAS&GExcavation_2.pdf (archaeologists.net)

Historic England, 2015a, *Guidelines for Archaeological Project in Greater London.* Guidelines for Archaeological Projects in Greater London | Historic England

Historic England, 2015b, *Management of Research Projects in the Historic Environment (MoRPHE).* https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/heag024-morphe-managers-guide/

The articles given above concern the procedure and standards required for archaeological project management and strategy by the statutory body English Heritage. Have a look at summaries of these

on-line as they will give you a background to this particular facet of archaeological techniques and methods.

Recommended reading:

Baker, D. 1993. *Model Briefs and Specifications for Archaeological Assessments and Field Evaluations*. Association of County Archaeological Officers. INST ARCH AL 10 ASS. E-book

Barker, P.A. 1993. *Techniques of Archaeological Excavation*. London: Batsford (3rd Edition). ISSUE DESK INST ARCH AL BAR & INST ARCH AL BAR. E-book

Collis, J. 2001. *Digging up the Past*. Stroud: Sutton. (Chapter 2). ISSUE DESK IOA COL 8 & INST ARCH AL 11 COL. E-book

Drewett, P.L. 1999. *Field Archaeology: an Introduction*. London: UCL Press. (Chapters 5 and 6). ISSUE DESK IOA DRE 2 & INST ARCH AL 10 DRE. E-book

Greene, K. 2002. *Archaeology, an Introduction*. London: Batsford. (Chapter 3). (4th Edition). INST ARCH AL GRE. E-book

Roskams, S. 2001. *Excavation*. Cambridge: Cambridge University Press.

Westman, A. (ed.) 1994. *Archaeological Site Manual*. London: Museum of London. ISSUE DESK INST ARCH AL WES & INST ARCH AL WES. E-book

Lecture 5: 8/2/24. Excavating and recording archaeological sites

In the field there are three main types of record: the written record; the drawn record and the photographic record. Within these broad categories sit numerous sub-categories such as context sheets and bulk recording sheets; plans and sections; and film and digital photographs. The recording of the site is an integral part of the excavation process and is a key facilitator in the post-excavation process; the quality of the records kept will determine the quality of the post-excavation methodology and analysis, and ultimately the publication of the work.

We will consider the methods for the recording, analysis, interpretation and publication of archaeological stratigraphy. We will look at the laws/rules pertaining to the elucidating of geological and archaeological stratigraphy and, specifically, the Law of Superposition. As a way of identifying and documenting these relationships, most sites across the world now employ the system of single context recording system. This system lends itself during and after excavation to the construction of Harris matrices which can be used to illustrate the chronological relationship of the excavated contexts. Further work on Harris matrices will be undertaken in Practical 5.

The key to success in recording excavations is to keep detailed records; these might then be additionally supported by the use of site notebooks and an informal photographic record. The database produce should be fully integrated so that context sheets link up to feature sheets, specialist recording sheets, drawings and photographs. The records should also include details of other activities such as metal detecting of spoil heaps, geophysics carried out on areas of the excavation, samples taken for dating etc. The lecture will also address the description of archaeological sections, looking at key features and the terms utilised to describe them.

When considering the recording methodology to be used on site, the archaeologist must also consider how the data will be used off-site; for example how do the records lend themselves to construction of computerised data bases? Does the system lend itself to effective comparison with other databases? It is vital that these sorts of questions are weighed and solved before excavation begins but the responses and methods must also be flexible enough to allow for manipulation and change during the excavation stage.

Essential Reading:

Drewett, P.L. 2011. *Field Archaeology: an introduction*. (2nd Edition) Oxford: Routledge. **CHAPTER 4. Recording archaeological sites**, and **CHAPTER 6. Digging the Site.** ISSUE DESK IOA DRE 2 & INST ARCH AL 10 DRE E-book

Harris, E.C. 1989. *Principles of Archaeological Stratigraphy*. (2nd edition). London: Academic Press. (See especially chapters 7, 8, 9 and 11, although this is quite a short book and fundamental). INST ARCH AL HAR (028). E-book: http://www.harrismatrix.com/

Westman, A. (ed.) 1994. *Archaeological Site Manual*. London: Museum of London. ISSUE DESK INST ARCH AL WES & INST ARCH AL WES. E-book

Recommended Reading:

Barker, P.A. 1993. *Techniques of Archaeological Excavation*. London: Batsford (3rd Edition). Chapter 6. ISSUE DESK INST ARCH AL BAR & INST ARCH AL BAR. E-book

Bettess, F., 1998. *Surveying for Archaeologists*. Durham: University of Durham. [ARCH AL 12 BET; TEACHING COLLN ARCH 2518]

Courty, M.A., Goldberg, P.A. and Macphail R.I. 1989. *Soils and Micromorphology in Archaeology. Manuals in Archaeology*. Cambridge: Cambridge University Press. ISSUE DESK INST ARCH COU.

Harris, E.C. 1975. The stratigraphic sequence: a question of time. *World* Archaeology. 7: 109–121. INST ARCH PERS. E-book

Harris, E.C. 1977. Units of archaeological stratification. *Norwegian Archaeological Review*. 10: 84–94. INST ARCH PERS E-book

Harris, E.C., Brown M.R. and Brown G.J. (eds.) 1993. *Practices of Archaeological Stratigraphy*. Academic Press: London. INST ARCH AL HAR. E-book

Jones, A.P., Tucker, M.E. and Hart, J.K (eds.). 1999. *The description and analysis of Quaternary stratigraphic field sections*. QRA Technical Guide No. 7. London: Quaternary Research Association.

Renfrew, C. and Bahn, P. 2008. Archaeology, Theories, Methods and Practice. (5th edition) . London: Thames and Hudson. Pages 107–117. INST ARCH AH REN. E-book

Roskams, S. (ed.) 2000. *Interpreting Stratigraphy: site evaluation, recording procedures and stratigraphic analysis: papers presented to the Interpreting Stratigraphy Conferences 1993–1997*. Oxford: British Archaeological Reports International Series 910. INST ARCH AL 10 QTO ROS.

Trudgill, S. 1989. *Soil Types: a Field Identification Guide*. Field Studies Council, AIDGAP Guide 196.

Wheeler, R.E.M. 1954. *Archaeology from the Earth*. Oxford: Oxford University Press. (Especially chapter 4). INST ARCH AL WHE. E-book

Practical 3: 8 & 22/2/24. Designing an excavation

When archaeologists design a field project, they do it by asking a series of questions about one or more sites. The goal of field research is to conduct data recovery operations in such a way that the archaeologist's questions may be addressed by the artefacts, soil samples, features, and contexts they reveal, and with the field notes they record. With these broad goals in mind, the archaeologist must adapt their field methods and techniques to a particular situation. Since every archaeological site is unique in some way, the field strategy must be flexible. In addition, the archaeologist must operate within time and budget constraints, which means that the entire site cannot be excavated. The archaeologist must use a variety of methods to maximize the data recovered. In this practical you will devise a field strategy to answer a set of specific questions about a site.

Week 6: Reading week, w/c 12/2/24. NO CLASS

Lecture 7: 22/2/24. Field Survey and Geographical Information Systems (GIS)

This lecture will look at different methods for surveying in archaeology giving a quick overview from basic techniques to modern methods utilising Total Stations and Global Position Satellites. We will discuss how these data can be combined with other information collected by means of surface

survey (including aerial photography and other types of remote sensing, and surface survey, as well as the collation of existing information). Putting all this information together to build up a picture of the archaeology of a region is a complex business but it has recently been made easier by the adoption of Geographical Information Systems, computing programs for the storage and manipulation of information about spatial distributions.

Essential Reading:

Conolly, J. and Lake, M. 2006. *Geographical Information Systems in Archaeology*. Cambridge: Cambridge University Press. **Chapters 3 and 4.** ISSUE DESK IOA CON 10, INST ARCH AH CON E-book

Wheatley, D. and Gillings, M. 2002. *Spatial Technology and Archaeology.* London: CRC Press. **Chapter 3: Acquiring and Integrating data**. E-book

Recommended Reading:

Banning, E. B. 2002. *Archaeological Survey*. London: Kluwer Academic. INS ARCH AL 12 BAN

Bettess, F., 1998. *Surveying for Archaeologists*. Durham: University of Durham. ARCH AL 12 BET; TEACHING COLLN ARCH 2518

Hogg, A. 1980. *Surveying for Archaeologists and other Fieldworkers*. London: Croom Helm. INST ARCH AL 12 HOG; ENGINEERING D10 HOG.

Howard, P. 2006. *Archaeological Surveying and Mapping*. London: Routledge. INST ARCH AL 12 HOW. E-book

Leach, P. 1994. *The Surveying of Archaeological Sites*. London: Archetype. INST ARCH AL 12 LEA.

Lecture 8: 29/2/24. Standing buildings archaeology

Some archaeological evidence survives above ground, notably in the case of historic buildings. This class provides an introduction to how one might carry out the structural analysis of buildings, starting with the visual evaluation of standing buildings to common techniques employed for recording standing fabric, including: record photography, planning by hand, stone-by-stone recording, and instrument-based survey and recording.

Essential Reading:

Historic England 2015. *Understanding Historic Buildings: a Guide to Good Recording Practice.* E-book: https://historicengland.org.uk/images-books/publications/understanding-historic-buildings/heag099-understanding-historic-buildings/

Historic Scotland 2003. *Measured Survey and Building Recording. Guide for Practitioners 4*. E-book: https://issuu.com/hspubs/docs/guide-for-practitioners-4---measured-survey-and-bu/3

Recommended Reading:

Brittain C., T 2007. *How to Read a Building: interpret a building's character and style*. London: Collins

Morriss, R K 2000. *The Archaeology of Buildings*. Stroud, Tempus INST ARCH DAA 398 MOR

Rodwell, W. 1989. *English Heritage book of Church archaeology*. London: Batsford Ltd/English Heritage. INST ARCH DAA 398 ROD

Practical 4: 29/2/24 & 7/3/24. Using computers in pre-excavation planning

NOTE: Laptop or tablet required

In this session you will learn how to use the spreadsheet program Excel in the context of pre-excavation planning. You will use Excel to solve simple problems involving archaeological data, and begin to complete the worksheet for Assessment 3i.

Lecture 9: 7/3/24. Environmental Archaeology sampling and chronological resolution

This session will consider environmental archaeology—its aims in terms of contributing to archaeology and archaeology contributing to environmental sciences—and methods for sampling, including for plants, animals, geoarchaeology, and ancient DNA. We will consider issues of preservation on sites in different world region and landscape contexts (caves, deserts, waterlogged). Case studies will include studies from the Mesolithic Yorkshire (Star Carr), Neolithic Turkey (Catalhoyuk), and the medieval Baltic (Crusader castles), each of which illustrates strengths of limitation in environmental archaeological sampling. We will also consider new direction in ancient DNA extraction from sediments and the new perspectives it offers on past environments.

Essential readings:

Wilkinson, Keith (Keith N.), and Chris Stevens. (2003) *Environmental Archaeology : Approaches, Techniques & Applications / Keith Wilkinson & Chris Stevens.* Stroud, Gloucestershire: Tempus, 2003. **CHAPTER 1.** Pp. 11-44. INST ARCH BB 6 WIL **Also available online through library.**

Canti, Matthew. "Environmental Archaeological Evidence: Preservation." *Encyclopedia of Global Archaeology*. New York, NY: Springer New York. 2391–2399. Web. Online https://link.springer.com/referenceworkentry/10.1007/978-1-4419-0465-2_847

Murphy, C., & Fuller, D. Q. (2017). The future is long-term: Past and current directions in environmental archaeology. *General Anthropology*, *24*(1), 1-10. Online: https://discovery.ucl.ac.uk/id/eprint/1552935/1/Murphy_6_Feb_2017_currentstateofenvironmental archaeol_DFed_CMed_PRed%20(1)%20(1).pdf

Liu, Y., Bennett, E. A., & Fu, Q. (2022). Evolving ancient DNA techniques and the future of human history. *Cell*, *185*(15), 2632-2635. https://www.sciencedirect.com/science/article/pii/S0092867422007140

Recommended readings:

Dobney, K., Hall, A., Kenward, H. and Miles, A., 1992. A working classification of samples types for environmental archaeology. *Circaea* 9 (for 1991): 24–26. INST ARCH PERS. Available through the on-line reading list.

Case studies

1) Milner, N., Lane, P., Taylor, B., Conneller, C., & Schadla-Hall, T. (2011). Star Carr in a Postglacial Lakescape: 60 years of research. *Journal of Wetland Archaeology*, *11*(1), 1-19.

2a) Ayala, G., & Wainwright, J. (2020). Çatalhöyük and its landscapes. *Near Eastern Archaeology*, 83(2), 88-97. https://www.journals.uchicago.edu/doi/10.1086/709176

2b) Wolfhagen, J., Veropoulidou, R., Ayala, G., Filipović, D., Kabukcu, C., Lancelotti, C., ... & Wainwright, J. (2020). The seasonality of wetland and riparian taskscapes at Çatalhöyük. *Near Eastern Archaeology*, *83*(2), 98-109. https://www.journals.uchicago.edu/doi/10.1086/708446

3) Banerjea, R. Y., Badura, M., Brown, A., Morandi, L. F., Marcinkowski, M., Valk, H., ... & Pluskowski, A. (2020). Feeding the Crusades: Archaeobotany, animal husbandry and livestock alimentation on the Baltic Frontier. *Environmental Archaeology*, *25*(2), 135-150.

4) Hudson SM, Pears B, Jacques D, Fonville T, Hughes P, Alsos I, et al. (2022) Life before Stonehenge: The hunter-gatherer occupation and environment of Blick Mead revealed by sedaDNA, pollen and spores. PLoS ONE 17(4): e0266789. https://doi.org/10.1371/journal.pone.0266789

Lecture 10: 14/3/24. Commercial archaeology

Developer Funded Archaeology comprises the largest source of field work and excavations in Britain today. Archaeological assessments, both desk-based and physical, watching briefs, evaluations and

full-scale mitigation exercises are fully integrated into the planning and development framework. This lecture introduces the origins of the developer funded system, covers the range of work covered by commercial archaeologists (with specific case studies) and discusses the opportunities and challenges of developer funded archaeology.

Please see below for some background reading for this session, these can all be found on the Moodle site for this lecture, as well as some interesting further reading. There is a framework for development-led archaeological work provided by the NPPF (National Planning Policy Framework) and the CIfA (Certified Institute for Archaeologists) Standards and Guidance, and it is worth familiarising yourselves with these. The Current Archaeology covers a range of opinion across different sectors from the early 2010s. I have also included some additional documents about the state of the sector in 2020, and the most recent Historic England guidance from 2015. There is also an interesting video, documenting the campaign to save the Rose Theatre that helped to kick start developer funded archaeology as we know it today.

Essential Reading:
CIfA 2021 *Professional Archaeology: a guide for clients* E-resource: Moodle

Southport Group 2011, *Realising The Benefits Of Planning-Led Investigation In The Historic Environment: A Framework For Delivery* E-resource: Moodle

Orange, H & Perring, D 2017 'Commercial Archaeology in the UK: public interest, benefit and engagement' in G Moshenska (ed) *Key Concepts in Public Archaeology*, 138–50. London: UCL Press E-book

Recommended Reading:
The web sites below show good examples of the activities of various commercial units as well large-scale infrastructure projects. They indicate the potential of liaison between the sectors to produce high quality research.

Archaeology South-East (The IOA's unit) https://www.ucl.ac.uk/archaeology-south-east/blog

Crossrail https://www.museumoflondon.org.uk/discover/tunnel-developmental-archaeology-crossrail-docklands

HS2 https://www.hs2.org.uk/building-hs2/archaeology/

Museum of London Archaeology (MOLA) https://www.mola.org.uk/blog

Pre-Construct Archaeology (PCA) https://www.pre-construct.com/category/news/

Cotswold Archaeology https://cotswoldarchaeology.co.uk/news/

Practical 5: 14 & 21/3/24. Stratigraphy and Harris Matrix

This practical builds on what you have learnt in Lecture 5 and involves the classes working through some examples of archaeological section drawings and photographs in order to establish a stratigraphic description of the sections and discuss the context numbering system which the excavators employed. We shall then look at a hypothetical Harris Matrix, details of which are downloadable from the Moodle site. The pdf of Ed Harris's seminal work is available on the Moodle site for reading and download. At the conclusion of the class you will begin assignment 3ii, which involves the construction of a Harris Matrix from archaeological plan and section drawings. Undertaking this work will lead to certification in your Archaeological Skills Passport.

Week 10: 21/03/24 Post-Excavation

Post-excavation work is integral to any archaeological project. It follows on from all fieldwork investigation (or data collection stage) and is equally important. Although the post-excavation

process can vary depending on the type of fieldwork undertaken – the aim is always the same: to process, analyse, understand, interpret and disseminate the data collected. Ultimately, this dissemination might range from a report for a client or funding body such at Historic England to an article in a specialist journal all the way through to a monograph or book. Dissemination can also include outreach events and social media presence for example which can often reach a larger and more varied audience.

This lecture will explore the how we go about doing this, detailing the steps involved and the existing frameworks that we work with, such as the Historic England Guidelines, CIfA Standards and Guidance and MoRPHE. Careful planning is essential to a successful project and we will look as some of the tools and approaches used and examine some case studies. Finally, we will work through an example site to see how you would approach the post-excavation process using some of the principles discussed.

Guidelines for Post excavation process

Andrews, G. 1991. *Management of Archaeological Projects (MAP 2).* London: English Heritage. INST ARCH DAA 100 ENS Available through the on-line reading list.

Historic England. 2015. *Management of Research Projects in the Historic Environment: the MoRPHE Project Managers' Guide*. Swindon: English Heritage. https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/

ALGAO, 2015 Advice Note for Post Excavation Assessment https://www.algao.org.uk/sites/default/files/documents/ALGAO_England_PXA_Advice_Note.pdf

CIfA Guidance and Toolkits for Post excavation work

CIFA 2014 *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* The Chartered Institute for Archaeologists https://www.archaeologists.net/sites/default/files/CIfAS&GFinds_1.pdf

CIfA Toolkit for Specialist Reporting https://www.archaeologists.net/reporting-toolkit

Examples of Archaeological publications

ASE Monographs some of which can be downloaded: https://www.ucl.ac.uk/archaeology-south-east/our-research/publications/monographs

ASE Occasional Papers: https://www.ucl.ac.uk/archaeology-south-east/publications/occasional

Examples of 'Grey Literature' (or client) reports

These can be found on the Archaeology Data Service (ADS) website: https://archaeologydataservice.ac.uk/archives/view/greylit/index.cfm

Critiques

Hamilton, S. 1999. Lost in translation? A comment on the excavation report. *Papers from the Institute of Archaeology* 10: 1–8. INST ARCH PERS.

Malt, D & Westman, A 1992 Assessment versus analysis, in *Interpretation of Stratigraphy: a review of the art* https://www.york.ac.uk/archaeology/strat/pastpub/92ch3.pdf

A critique of the introduction of MAP2 and its concepts; useful for understanding the evolution of approaches to data and reflects thinking and approaches at that time

Shanks, M. 1991. *Experiencing the Past*. Routledge: London/New York. SHORT LOAN COLL ANTHROPOLOGY C9 SHA; INST ARCH AH SHA.