UNIVERSITY OF CAMBRIDGE

Institute of Continuing Education

Undergraduate Diploma in Archaeology III

2017-2018

Course code: 1718DCR801

COURSE GUIDE

University of Cambridge Institute of Continuing Education, Madingley Hall, Cambridge, CB23 8AQ
Tel 01223 746222 www.ice.cam.ac.uk

Welcome to the **Undergraduate Diploma in Archaeology III,** a University of Cambridge award offered by the Institute of Continuing Education (ICE). The Diploma is taught and awarded at FHEQ level 5 (i.e. second-year undergraduate level) and attracts 60 credits. The award is completed in one academic year. For further information about academic credit please see our website: www.ice.cam.ac.uk/studying-with-us/information-for-students/qualifications-that-we-offer

The course offers three termly units and a syllabus and reading and resource list for each of these units are included in this course specification.

The course aims to:

- Provide students with a sound grounding in archaeological theory in order that they may understand how the discipline and archaeological interpretation progresses with time
- Provide students with a practical and hands-on approach to the field, so that they may develop key laboratory-based skills and a familiarity with and overview of practical techniques relating to a variety of different archaeological materials
- Provide students with an in-depth knowledge and understanding of particular chronological and geographical areas within the discipline
- Prepare students for putting into practice in the field, through archaeological excavation and survey, the concepts that they have learned during their studies
- Give students an opportunity to expand their research skills and abilities in writing extended documents and analysing data

Transferable skills for further study and employability

- The capacity for independent thought and judgement
- The development of independent learning, study and time management skills
- The deployment of skills in critical reasoning
- The development of competence in using IT to support one's work
- The ability to work with others, productively and equitably
- The qualities necessary for employment requiring the exercise of some personal responsibility and the demonstration of high levels of motivation and personal commitment through part-time study

Study hours

The award of academic credit is a means of quantifying and recognising learning and within the UK, one credit notionally represents 10 hours of learning[1]. Each of the units in this course attracts 20 credits so students should expect to need to study for approximately 200 hours in total to complete each unit successfully. However, it is recognised that students study at different paces and use a variety of approaches, so this is a recommendation, rather than a hard-and-fast calculation.

1 'Academic credit in higher education in England – an introduction'. The Quality Assurance Agency for Higher Education, 2009

Teaching staff

Academic Director:

Dr Gilly Carr is a University Senior Lecturer in Archaeology with academic responsibility for Archaeology at the Institute of Continuing Education. She also has additional responsibility for programmes in Heritage Studies, Anthropology, Egyptology and Classical Archaeology. She is attached to the University of Cambridge Department of Archaeology, is a member of the McDonald Institute for Archaeological Research and a Fellow and Director of Studies at St Catharine's

College. Since 2006 Gilly has been working in the field of Conflict Archaeology, Heritage Studies and POW Archaeology.

Tutors:

Dr Corinne Roughley is an Affiliated Lecturer in the Department of Archaeology and Anthropology and a Fellow of Hughes Hall. She studied for a BA in Archaeology and Anthropology at Cambridge (1996), followed by an MPhil in Geographic Information Systems and Remote Sensing (1997). Her PhD was on the use of GIS and visualisation techniques for understanding the Neolithic landscape of the area of Brittany around Carnac. Her research interests focus on approaches to understanding the prehistoric landscapes of Northwest Europe.

Dr Emma Lightfoot (Adrian Research Fellow, Darwin College, Cambridge) is a bioarchaeologist interested in the environmental, cultural and social aspects of diet, specializing in stable isotope analysis. She studied for a BA in Archaeology and Anthropology at Oxford (2004), followed by an MSc in Archaeological Science (2005). Her PhD used carbon, nitrogen and oxygen isotopes to investigate the relationships between diet, migration and health in Iron Age to Early Mediaeval Croatia, considering the extent to which political, social and cultural change affected diet. Her current research uses oxygen isotopes to investigate the climatic influences on the globalization of crops.

Anne Taylor is a free-lance lecturer and researcher, with a particular interest in the prehistory of textiles and experimental archaeology. She has a BEd from Padgate College, University of Manchester and, as a mature student, a BA in Archaeology and Anthropology from Cambridge (2000). She worked for Aberdeen University as a part-time archaeology lecturer for the Centre for Lifelong Learning, and as Curatorial Assistant at Marischal Museum. Before moving to the north of England, she was Curatorial Assistant for Archaeology at the Museum of Archaeology and Anthropology, Cambridge.

Dr Paul Spoerry is a professional field archaeologist who gained his Doctorate from Bournemouth University in 1990. He is a specialist in the medieval period with particular interest in Medieval ceramics, towns and landscape in general. He has worked full-time for Cambridgeshire County Council since 1992, managing a great range of archaeological projects. His publications include work in Greece as well as site reports from around the South of England and pottery studies. In recent years, he has published works on the development and topography of medieval towns including Huntingdon, Peterborough, St. Neots and Ramsey.

Stephen Macaulay has 30 years' experience in British, French and North American archaeology. He has extensive experience of most types of British archaeological projects (in particular Roman), in particular those with education, outreach and heritage conservation elements. He has been a leading proponent of Public Archaeology throughout his career and has considerable experience in developing grant funded heritage projects to deliver Public Archaeology.

Aileen Connor has been a field archaeologist since graduating in 1982. She has worked on a wide variety of sites of all periods mainly throughout the Eastern Region but also in the midlands, London and the north-west. She has been a Project Manager since 2002. Throughout her career she has had a particular commitment to training new archaeologists and encouraging participation in Archaeology through formal training excavations. Currently she manages the Oxford Archaeology Graduate Trainee Programme on behalf of Oxford Archaeology's Cambridge office.

Administrative staff

Academic Programme Manager: Linda Fisher, Institute of Continuing Education, University of Cambridge, Madingley Hall, Madingley, Cambridge, CB23 8AQ, 01223 746218 linda.fisher@ice.cam.ac.uk

Programme Administrator: Liz Deacon, Institute of Continuing Education, University of Cambridge, Madingley Hall, Madingley, Cambridge, CB23 8AQ, 01223 746227 liz.deacon@ice.cam.ac.uk

Venue

Madingley Hall is the University of Cambridge's campus dedicated to continuing education for adults. The magnificent Hall was built in the sixteenth century and acquired by the University in 1948. The Hall has been used by the Institute of Continuing Education as a venue since 1975.

You will be taught in one of 14 classrooms at Madingley Hall and, occasionally, at other venues. Classrooms are arranged and equipped to encourage effective small group learning and peer interaction. Technology-enhanced learning, including lecture capture where appropriate, is used in many classes and Wi-Fi is available throughout the site. We also provide a range of social learning spaces which you can make use of before, or after, your class. Seven acres of superb gardens and grounds designed by Capability Brown provide space to think, reflect and relax. We offer a range of catering including formal dining, sandwiches and snacks, and a full-service bar. If you are travelling a long distance you may wish to book accommodation in one of the Hall's 62 en suite bedrooms.

The Hall is situated three miles west of Cambridge with easy access from the M11 and the A14. There is ample free on-site car parking. Central London and Stansted Airport can be reached in under an hour by train from Cambridge railway station. Taxis from the railway station to Madingley Hall typically take around 20-25 minutes. Full directions are given on our website at: http://www.ice.cam.ac.uk/about-us/how-find-us

Please note that some sessions are held in the Department of Archaeology rather than at Madingley Hall; such sessions are clearly labelled on the timetable.

Contact details of ICE

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Please also refer to the 'information for students' section on ICE's website www.ice.cam.ac.uk/studying-with-us/information-for-students and the 2017/18 Student Handbook for award-bearing courses for further information and guidance relating to all aspects of the course including study skills, assignments, assessment and moderation. The Course Information and Help and Guidance section of the ICE VLE will also contain valuable information specific to your course.

Information correct as at 10/08/2017

Syllabus for first unit

Michaelmas term 2017

The science of the past

Start date	7 October 2017	**End date**	9 December 2017
Dates	7 October 28 October 18 November 9 December	**No of meetings**	4 Saturday day schools
Venues	Madingley Hall, Madingley, Cambridge, CB23 8AQ Department of Archaeology, Cambridge CB2 3DZ		
Tutors	Dr Corinne Roughley and Dr Emma Lightfoot		
Guest lecturers	Dr Rachel Ballantyne, Dr Sean Taylor and others TBC		

Aims

This unit aims:

- to familiarise students with the principles of the major scientific methods used within the discipline of archaeology for reconstructing the past environment and human-environment interactions
- to enable students to understand the application and limitation of these methods in the detailed examination and evaluation of archaeological evidence
- to allow students to develop some basic practical skills

Content

The course begins by considering the role of scientific approaches within archaeology. We then examine the application of scientific methods for the study of past landscapes through lectures and introductory practical sessions on soil and geophysics.

We will explore the interaction between people and their environment in more detail. The use of stable isotope analysis for studying past diet and mobility will be considered. Students will then be introduced to the identification of domesticated plants and animals in the archaeological record through practical sessions. The ways in which such evidence can be used for interpretation will be critically evaluated both in lectures and in discussion during the practicals. The potential of residue analysis will also be discussed. The advances in computing for integrating, analysing and presenting this wide range of data, in particular the use of Geographical Information Systems (GIS), will be presented.

A further area which is considered throughout the course is dating as it underpins all archaeological enquiry. The application of scientific techniques has revolutionised the dating of

archaeological remains, and was also one of the earliest widely recognised uses of science in archaeology.

Presentation of the unit

The unit will be taught through 4 day schools held at Madingley Hall or the Department of Archaeology. Lectures will provide background information on the techniques covered and encourage students to consider the limitations of the techniques discussed. The practical sessions will enable students to have hands on experience. Sessions held in the Department of Archaeology laboratories include identifying and quantifying a sample of charred seeds from the Danebury project, using the bone teaching collection, and analysing isotope data. There will the opportunity to take soils samples for visual examination and use geophysical survey equipment (weather permitting) at Madingley Hall.

The final session is a seminar where students will be encouraged to prepare contributions on the different scientific techniques which have been used at Danebury Iron Age hillfort and its environs and discuss how the approaches complement each other to further our understanding of the site and surrounding landscape.

This unit draws on the interests and expertise of the two tutors. This is complemented by a wide range of expert guest lecturers who have been involved in teaching in the Department of Archaeology, enabling students to benefit from the knowledge and skills of subject-specialists. At least one of the course tutors will be present at all of the sessions to answer students' questions and ensure the smooth running of the course.

Provisional timetable

CR = Corinne Roughley EL = Emma Lightfoot
RB = Rachel Ballantyne ST = Sean Taylor

Session	**Date**	**Content**
Day 1 Madingley Hall	Saturday 7 October	Introduction (CR); Soils (ST); Geophysics (CR + TBC)
Day 2 Department of Archaeology	Saturday 28 October	Isotopes (EL) + Animal bones (TBC)
Day 3 Department of Archaeology	Saturday 18 November	Archaeobotany (RB)
Day 4 Department of Archaeology	Saturday 9 December	Residues (EL); Isotopes data analysis (EL); GIS (CR); Seminar (EL + CR)

Learning outcomes

As a result of the unit, within the constraints of the time available, students should be able to:

- demonstrate awareness of the importance of the major scientific approaches for investigating past environments and human-environment interactions;
- discuss, in written work, the methodologies of the techniques presented in the course;
- evaluate, in written work, the applications and limitations of these techniques for a range of archaeological contexts;
- use basic scientific techniques to interpret archaeological materials encountered in the practicals;
- assess the contribution of the techniques to wider archaeological debates.

Student assessment

Students are required to complete two assignments from the options below, weighted 50/50. Both assignments should be between 1,500-2,000 words each.

The assignments comprise:

(a) an essay topic from the list below or an alternative **discussed and agreed in advance in writing with the tutor.** Further guidance for these will be available on the VLE.

1. Evaluate the impact of scientific dating techniques for our understanding of **EITHER** Neolithic and Early Bronze Age Wessex **OR** the Lower Palaeolithic of sub-Saharan Africa **OR** the arrival of humans in Australasia.

2. Has scientific study of Ötzi **OR** Richard III enhanced our understanding of the wider society in which they lived?

4. Discuss what the application of scientific techniques has added to our understanding of a major dietary transition in the archaeological record, such as the Mesolithic to Neolithic transition (**alternatives to be agreed in advance with the Emma Lightfoot.**)

5. Compare and contrast at least two methods for investigating the past environment. Your answer must be illustrated with discussion of appropriate specific examples.

AND ONE of the following:
(b) A project based on the seeds or isotopes practical. The project will comprise two parts – practical work in the laboratory and further reading to consider both the techniques used and the specific material studied. Guidance will be provided and uploaded to the VLE.

1. Seeds project: Present and evaluate the results of your practical work on charred seeds from Danebury. Discuss your findings within the context of both wider research on Danebury and relevant debates within archaeobotany.

2. Isotopes project: Present and interpret the d13C and d15N data from the hair practical and the quiz data (include plots of your data). For the quiz data, match the groups to the populations described in the handout - you will get credit for being able to argue your answers on scientific grounds, rather than getting this right or wrong.

OR
(c) A further essay based on our discussion of Danebury, as listed below:

Discuss the methodology and results from at least two scientific techniques which have been used at Danebury Iron Age hillfort and its environs **and** evaluate the contribution those techniques have made to our wider understanding of the site.

If students wish to create their own titles from the list, this must be agreed in writing with the tutor first.

Closing date for the submission of assignments: Monday 8 January 2018 by 12.00 (noon) GMT*
*Greenwich Mean Time

Reading and resource list

Please note that a more detailed list will be given on the VLE

Introductory text books

Greene K & Moore, T. 2010, *Archaeology: An Introduction.* 5th ed. Routledge

Renfrew C & Bahn P, 2016. *Archaeology: Methods and Theories* 7th ed. Thames & Hudson

*Andrews K & Doonan R 2003. *Test tubes and trowels: using science in archaeology* Tempus

***Recommended introduction to this course.**

More detailed books

These are recommended for understanding specific contexts, and as a starting point for completing written work. Further specific examples will be provided by lecturers.

Aitken, M. J. 1990. *Science-based dating in archaeology* Longman

Bell, M. & M. J. C. Walker, 1992. *Late Quaternary Environmental Change* Longman

**Brothwell, D.R. & Pollard, A.M., *Handbook of Archaeological Sciences* Wiley 2005

Brown, T.A. & Brown, K. 2011 *Biomolecular Archaeology: An Introduction*. Wiley-Blackwell

Cox, M. & Mays, S. 2000. *Human Osteology in Archaeology and Forensic Science*

Greenwich Medical Media

*Cunliffe, B. 2003. *Danebury Hillfort* Tempus

Evans, T. & O'Connor J. 2005 *Environmental Archaeology: Principles and Methods* Sutton

French, C. 2002 *Geoarchaeology in Action* Routledge

French, C. 2015*. A Handbook of Geoarchaeological Approaches for Investigating Landscapes and Settlement Sites - Studying Scientific Archaeology* Wiley.

Gater, J. & Gaffney, C. 2003. *Revealing the buried past: geophysics for archaeologists* Tempus

Goldberg, P & MacPhail, R. 2006. *Practical and Theoretical Geoarchaeology* Blackwell.

Jones, M. 2001. *The Molecule Hunt* Penguin

Mays, S. 1998. *The Archaeology of Human Bones* Routledge

O'Connor, T. 2000. *The Archaeology of Animal Bones* Sutton

Reitz, E.J. & Wing, E.S. 2008 *Zooarchaeology*. Cambridge University Press

Weiner, S. *Microarchaeology: Beyond the Visible Archaeological Record*. Cambridge University Press (2010)

*Introductory reading for Assignment B and Seminar. A more detailed reading list will be provided to assist students with completing the assignment and contributing to the seminar

** A more detailed book, specific sections will be indicated by the lecturers.

Useful websites

http://www.english-heritage.org.uk/professional/advice/advice-by-topic/heritage-science/archaeological-science/

English Heritage professional advice website. The sub-topics at the left hand site give you links to free publications on a wide range of topics. Although some of these are quite technical, they are aimed at a broad audience and are strongly recommended.

http://archaeologydataservice.ac.uk/archives/view/danebury_var_2003/

Introduction to the ADS archive of the Danebury Project and links to CBA Research Reports which can be downloaded.

Syllabus for second unit

Lent term 2018

Making sense of artefacts

Start date	13 January 2018	**End date**	24 March 2018
Dates	13 January 27 January 24 February 10 March 24 March	**No of meetings**	5 Saturday day schools
Venues	Madingley Hall, Madingley, Cambridge, CB23 8AQ Museum of Archaeology and Anthropology, Downing St, Cambridge CB2 3DZ		
Tutors	Dr Corinne Roughley and Anne Taylor		
Guest lecturer	Dr Sam Lucy		

Aims

The discipline of archaeology is rooted in the material remains of the past. Archaeological interpretation is inextricably linked with the ways in which archaeologists look at artefacts.

This unit aims to:

- provide the basic skills needed for examining and recording artefacts, by looking at a range of materials in lectures and practical sessions
- explore the ways in which the detailed study of artefacts allows archaeologists to understand past societies and provide interpretations for a wider audience
- evaluate the roles of scientific analysis, experimental archaeology and social anthropology for furthering our understanding of the artefacts we study and their relation to the wider questions of archaeological inquiry

Content

Students will be taught through illustrated lectures and practical sessions. The introductory lecture will consider the different ways in which archaeologists have studied artefacts. The following lectures will look at approaches to different materials, and then examine how the study of artefacts can help us consider important areas of archaeological research such as trade and exchange, strategies for production and consumption, and craft specialisation. The importance of anthropological models and appropriate scientific analysis will be considered.

The practical sessions will focus on hands-on analysis of major categories of material, such as pottery, flint and metal artefacts. The students will also be introduced to issues surrounding the conservation of artefacts. Archaeological illustration will be taught in a practical session.

Presentation of the unit

The course will be taught through five day schools; the first and final days are at Madingley Hall with middle three sessions in the Department of Archaeology/Museum of Archaeology and Anthropology. Each main type of material (flint, pottery, metal) will be introduced through an informal lecture, some of which have a practical element. The practical sessions then allow students to handle objects from the teaching collection. Students will also learn the basics of archaeological illustration. The final day looks at some of the major themes in material culture studies. Together, these themed lectures and specific practical sessions provide a wide-ranging approach to the study of artefacts.

Provisional timetable

CR = Corinne Roughley AT = Anne Taylor SL = Sam Lucy

Session	**Date**	**Content**
Day 1 Madingley Hall	Saturday 13 January	Intro (CR), plus lectures on flint (CR) and pottery (AT)
Day 2 MAA/ Department of Archaeology	Saturday 27 January	Practicals on flint and pottery plus illustration skills (AT plus CR)
Day 3 MAA/ Department of Archaeology	Saturday 24 February	Metals lecture plus practical (SL)
Day 4 MAA/ Department of Archaeology	Saturday 10 March	Organics etc. in the morning (AT) plus extra drawing time in the afternoon
Day 5 Madingley Hall	Saturday 24 March	Trade and exchange (CR), consumption (CR), and specialisation (AT)

Learning outcomes

As a result of the unit, within the constraints of the time available, students should be able to:

- evaluate a wide range of approaches and techniques used to study artefacts, and be able to discuss the appropriate use and limitations of the methods studied;
- demonstrate their understanding of artefact analysis through practical exercises and other assessed work;
- consider critically how the results of specialists are used to form interpretations about the past.

Student assessment

Complete two assignments from the options below, weighted 50/50. One must be an essay and one must be the project. Both assignments should be between 1,500-2,000 words each.

Essay titles

If students wish to find a different assignment to those provided below, then this *must* be discussed and agreed in writing with the tutor first.

1. Critically analyse the concepts of “chaîne opératoire” and the “biography of objects”, examining how these ideas have developed, how they have been used, and how useful these concepts are for archaeologists.

2. Is it possible, and useful, to identify objects as gifts or commodities from the archaeological record alone? Illustrate your answer with relevant specific examples.

3. How can we distinguish between different types of craft production (such as individual, household or community specialisation)? You should evaluate the role of **both** archaeological science and ethnoarchaeology in your answer, and consider more than one type of material.

4. A big question in archaeology is: "How and why are new technologies adopted?" Discuss the main theories and illustrate your answer with relevant archaeological examples.

Project

For any one artefact, provide a full archaeological report which should include: a detailed description of the object; evidence for techniques used in its manufacture; possible interpretations of its use; its provenance and "life history". The report should be illustrated in a professional style with maps (where relevant) and archaeological drawings and/or photographs as appropriate.

Extra time is included during day-school 4 for you to make drawings and observations of an artefact which may (but does not have to) form the starting point for your project.

Closing date for the submission of assignments: Monday 16 April 2018 by 12.00 (noon) BST*

*British Summer Time

Reading and resource list

Further lists and guidance will be given with each lecture/practical

Items marked * are particularly recommended.

To assist you in targeting your reading, references are included in each relevant subheading. You must consider several sources for each essay, but you are not expected to read this list in its entirety.

Note that for many of the books specific chapters are recommended for this particular course, and other parts of the same book may be relevant only for other courses/levels of study, so do try not to get distracted or overwhelmed by chapters which you do not need to read this term.

General:

Renfrew, C. and P. Bahn, 2016, Archaeology: Theory, methods and practice*, (7th edn.). London: Thames and Hudson.

*Gamble, C. 2014 *Archaeology: The Basics* (3rd edn) Routledge.

Coles, J. 1979, *Experimental Archaeology*. London: Academic Press**.**

Henderson, J., 2000 The *Science and Archaeology of Materials.* London: Routledge.

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley.

Sections 5 (Biological Resource Exploitation) and 6 (Inorganic Resource Exploitation).

Schlanger, N. and A. Sinclair (eds) 1990 *Technology in the Humanities. Archaeological Review from Cambridge* 9.1

Petersson, B. and Narmo, L. E. (eds) 2011. *Experimental Archaeology*. Lunds University

Brodie, N., Kersek, M. M., Luke, C., Walker Tubb, K. (eds) 2006*. Archaeology, Cultural Heritage, and the Antiquities Trade*. University Press of Florida

Dudley, S. H. (ed). 2010. *Museum Materialities*. Routledge

Some specific readings for each topic are given below.

Approaches to the study of material culture

Appadurai, A. (1986) *The Social Life of Things*. Especially chapter 5 by Renfrew.

Conkey, M. and C. Hastorf 1990. *The uses of style in archaeology*. CUP.

DeMarrais, E., L.J.Castillo, and T.K.Earle. 1996. Ideology, materialization, and power strategies. *Current Anthropology* 37: 15 – 31.

DeMarrais, E., C Gosden and C. Renfrew. 2004. *Rethinking materiality*. McDonald Institute Monographs. Recommended Introduction, Chapters 1-2, 10, 13-16 and 21.

Gosden, C. & Y. Marshall. (1999) The cultural biography of objects. *World Archaeology* 31(2):169-178.

Hodder, I. 1986. *Reading the Past: current approaches to interpretation in archaeology*. Chapter 6 (An ethnohistorical example: reconsideration of ethnoarchaeology and Middle Range Theory)

Hodder, I. 1992. *Theory and Practice in Archaeology*. Routledge. Chapter 3 (Symbols in Action) and Chapter 14 (Material Practice, Symbolism and Ideology).

Hodges, H.W., 1976, *Artefacts: an introduction to early materials and technology.* London: J Baker.

Jones, A. 2002. *Archaeological Theory and Scientific Practice*. CUP Especially chapters 6 and 7.

Jones, A. and G. MacGregor. (eds) 2002. *Colouring the Past: the significance of colour in archaeological research.* Berg

Karlin, C. and M. Julien. 1994. Prehistoric technology: a cognitive Science? in C. Renfrew and E. Zubrow (eds) *The Ancient Mind: Elements of Cognitive Archaeology* pp143 – 151. CUP.

Schlanger, N. 1994 Mindful technology: unleashing the chaîne opératoire for an archaeology of mind. in C. Renfrew and E. Zubrow (eds) The *Ancient Mind: Elements of Cognitive Archaeology* pp143 – 151. CUP.

Sellet, F. 1993. Chaîne opératoire; the concept and its application. *Lithic Technology* 18: 106-111

Shanks, M. and C. Tilley (1992). *Re-Constructing Archaeology: Theory and Practice*. Routledge. Chapter 7.

Stone

*Andrefsky, W. 1998. *Lithics*. CUP

Bradley, R. and M. Edmonds 1993. *Interpreting the Axe Trade: Production and Exchange in Neolithic Britain*. CUP.

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley. Chapter 37 (Edmonds)

Church, T. 1994. Lithic Resource Studies: A Sourcebook for Archaeologists *Lithic Technology* Special Publication No. 3.

Dibble, H. 1995. Middle Palaeolithic Scarper Reduction: background, clarification, and review of the evidence to date. *Journal of Archaeological Method and Theory* 2 (4): 299 – 368

Edmonds, M. 1995. *Stone Tools and Society*. Batsford.

Karlin, C. and M. Julien. 1994. Prehistoric technology: a cognitive Science? in C. Renfrew and E. Zubrow (eds) *The Ancient Mind: Elements of Cognitive Archaeology* pp143 – 151. CUP.

Keeley, L. H, 1980. Experimental *Determination of Stone Tool Uses*. University of Chicago Press, Chicago

Sattord, M. 1998. In search of Hindsgavl: experiments in the production of Neolithic Danish Flint daggers. *Antiquity* 72. 338 – 49.

Scarre, C. 2004 Displaying the Stones: the Materiality of “Megalithic” Monuments. In E. DeMarrais,, C Gosden and C. Renfrew. *Rethinking materiality. McDonald Institute Monographs.*, Chapter 13 p141-152.

*Sellet, F. 1993. Chaîne opératoire; the concept and its application. *Lithic Technology* 18. 106-111

Schlangder, N. 1990. Techniques as Human Actions – Two perspectives. In Schlanger, N. and A. Sinclair (eds) 1990 Technology in the Humanities. *Archaeological Review from Cambridge* 9.1**:**18-26

Schlander, N. 1994 Mindful technology: unleashing the chaîne opératoire for an archaeology of mind. in C. Renfrew and E. Zubrow (eds) *The Ancient Mind: Elements of Cognitive Archaeology* p143 – 151. CUP.

Yekes, R. W. and P. N. Kardulias 1993. Recent developments in the analysis of lithic artefacts. *Journal of Archaeological Research* 1(2). 89 – 119.

Pottery and other containers

Anderson, A. 1984. *Interpreting Pottery*. Batsford, London.

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley. Chapter 36 (Whitbread)

Gibson, A. 2002. *Prehistoric Pottery in Britain and Ireland*. Tempus.

Jones, A. 2002. *Archaeological Theory and Scientific Practice*. CUP Especially chapters 6 and 7.

Orton. C, Tyers, P., &, Vince, A. 1993. *Pottery in Archaeology*. Cambridge University Press. Cambridge

Rice, P. M, 1987. *Pottery Analysis: a Sourcebook*. Chicago University Press

Sherratt, A. 1997 *Economy and Society in Prehistoric Europe.* Chapters 15 – 17.

Metals and burial

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley Chapters 39 and 40.

Lucy, S. and A. Reynolds (eds) 2002 *Burial in early medieval England and Wales*. The Society for Medieval Archaeology, London.

Lucy, S. 2000 *The Anglo-Saxon way of death: burial rites in early England*. Sutton, Stroud.

Ottaway, B.S. 2001. Innovation, Production and Specialisation in Early Prehistoric Copper Metallurgy. *Journal of European Archaeology* 4(1): 87 – 112

Renfrew, C. 1986 Varna and the emergence of wealth in prehistoric Europe. In .Appadurai, A. *The Social Life of Things*. chapter 5 p 141-168

Roberts, B. et al 2009. Development of metallurgy in Eurasia *Antiquity* 83: 1012-1021

Shell, C.A. 2000. Metalworker or Shaman: Early Bronze Age Upton Lovell G2a Burial. In *Antiquity* 74: 271-2

Shennan, S. 1999. Cost, benefit and value in the organization of early European copper production *Antiquity* 73: 352-363

Sorensen, M.L.S. 1996 Reading Dress. *Journal of European Archaeology* 5(i): 93 – 114.

Sorensen, M.L.S and Thomas, R., ed. *The Bronze Age - Iron Age transition in Europe: aspects of continuity and change in European societies c. 1200 to 500 BC*. BAR S 483, Oxford.

Tylecote, R.F. 1987. *The Early History of Metallurgy in Europe*. Longman. London

Trade and Exchange

Bradley, R. and M. Edmonds 1993. *Interpreting the Axe Trade: Production and Exchange in Neolithic Britain*. CUP.

Brothwell, D. R. and A.M.Pollard eds. (2001). Handbook of Archaeological Sciences. Wiley. Chapter 41, Wilson and Pollard. “The Provenance Hypothesis.”

Clough, T. and W. Cummins. (eds) 1979. *Stone Axe studies*. Research Report 22, CBA.

*Davis, J. 1992. *Exchange*. OUP

Gale N.H. (ed.), 1991: *Bronze Age Trade in the Mediterranean*. Papers presented at the Conference held at Rewely House, Oxford, SIMA XC, Jonsered. Chapter by Andrew and Susan Sherratt (p351ff) particularly recommended.

Mauss, M. (1954) *The Gift*. London: Cohen and West.

Leach, J. W. & Leach, E. 1983. *The Kula: New perspectives.* Cambridge, Cambridge University Press.

Renfrew and Wagstaff 1982 *An Island Polity: the archaeology of exploitation in Melos*. CUP.

Scarre, C. and F. Healy. 1993. *Trade and Exchange in Prehistoric Europe*. Oxbow Monograph 33

Shennan, S. 1999. Cost, benefit and value in the organization of early European copper production *Antiquity* 73: 352-363

Craft Specialisation

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Helms, M. W (1993) *Craft and the Kingly Ideal*. Austin: University of Texas Press.

Hogseth, H. B., 2011. The language of craftsmanship. In Stig Sorensen, M. L., and Rebay-Salisbury, K.,(eds) *Embodied Knowledge*. Oxbow Books

Karlin, C. and M. Julien. 1994. Prehistoric technology: a cognitive Science? in C. Renfrew and E. Zubrow (eds) *The Ancient Mind: Elements of Cognitive Archaeology* p143 – 151. CUP.

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Sattord, M. 1998. In search of Hindsgavl: experiments in the production of Neolithic Danish Flint daggers. *Antiquity* 72. 338 – 49.

Shell, C.A. 2000. Metalworker or Shaman: Early Bronze Age Upton Lovell G2a Burial. *Antiquity* 74: 271-2

Food and drink

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley. Sections 5 (Biological Resource Exploitation)

Dietler, M. and B Hayden (2001) *Feasting: Archaeological and ethnographical perspectives on food, power and politics.* Smithsonian Press, Washington.

Hillman G.C. (1981) Reconstructing crop husbandry practices from charred remains of crops.In Mercer R. (ed.) *Farming Practice in British Prehistory*. Edinburgh University Press 123-162

Jones M.K. (2007) *Feast: why humans share food*. OUP.

Mulville, J. & A. K. Outram, eds., 2005, *The Zooarchaeology of Fats, Oils, Milk and Dairying*. Oxbow Books, Oxford.

O'Day, S.J. *et* al (eds) 2004. *Behaviour Behind Bones: the zooarchaeology of ritual, status and identity.* Oxbow

Sherratt, A. G. 1981 Plough and pastoralism: aspects of the Secondary Products Revolution. In I. Hodder, G. Isaac, and N. Hammond (eds) *Pattern of the Past* p. 261-305, Cambridge University Press, Cambridge. Read pp. 285-301. Also as Chapter 6 in Sherratt (1997)

Sherratt, A. 1997 *Economy and Society in Prehistoric Europe*. Chapters 6, 15 – 17.

Preservation and Conservation

Brothwell, D. R. and A.M.Pollard eds. (2001). *Handbook of Archaeological Sciences*. Wiley. Section 8.

Sease, C. 1987*. A Conservation Manual for the Field Archaeologist*. Archaeological Research Tools, Vol. 4. University of California, Los Angeles.

Ward, P. 1986. *The Nature of Conservation: A Race Against Time*. Getty Conservation Institute

Archaeological Illustration

*Steiner, M. 2005. *Approaches to Archaeological Illustration: A Handbook*. CBA.

Syllabus for third unit

Easter term 2018

Practical archaeological excavation and survey

Start date	14 April 2018	**End date**	7 July 2018
Dates	14 April 19 May 7 July	**No of meetings**	3 Saturday seminars plus 10 days of practical work (normally excavation) and an on-site individual supervision
Venue	Madingley Hall, Madingley, Cambridge, CB23 8AQ		
Tutors	Dr Paul Spoerry, Stephen Macaulay and Aileen Connor		

Aims

This unit aims:

- to show how the process of modern archaeological investigation and specifically how archaeological fieldwork develops from survey, project design, research aims to excavation and recording, through to post-excavation analysis, reporting and publication
- to enable students to take part in practical research in the field
- to enable students to compile a report on the project and the methods and techniques learned; and to present a critical assessment of those methods as applied to sites and landscapes in the field

Content

Through study on the course, students will gain a thorough grounding in the background to field archaeology and survey. They will acquire an understanding of the need for a project design and of the application of site-specific research aims to the design of an investigation. They will learn how these are then applied to the fieldwork, recording, post-excavation analysis and final reporting, to ensure that fieldwork makes a meaningful contribution to the archaeological record.

Students need a sustained period of practical experience, under the guidance of professional archaeologists, in order to understand and appreciate the methods and techniques of modern archaeology. This unit guides students through two weeks of project-specific activities, usually digging, during which they acquire a portfolio of guided experience in the basic elements of archaeological investigation and recording. Students who feel unable to participate in the physical process of actual ‘digging’ may choose from a range of other practical tasks such as survey, finds illustration, and site data analysis and research, based around the project work the group is otherwise engaged with.

As part of this unit, students will train over the course of ten days during two continuous weeks with Oxford Archaeology East (OAE). This training will take place between Friday 1 June and Sunday 17 June 2018 at a location within the Cambridge area. The ten days of teaching and supervision are intended to be during weekdays; however, we hope there will also be the opportunity to attend during weekends to gain additional experience for those that wish.

The unit is designed to enable students to write a detailed diary and analytical description of their work and a critical assessment of the strategies and methods adopted by the project or projects that they work on.

Presentation of the unit

Three seminars will take place at Madingley Hall and will be presented by the tutors.

The first (14 April) will cover approaches to fieldwork, justification for investigation, research context, research design, levels of preservation, choices of methodology and techniques of investigation along with background on the site forming the excavation component to the module.

The second (19 May) will concentrate on the skills and processes of investigation and recording of remains during excavations, including digging and recording remains, site planning and survey work and data and finds collection. Guidance will be given on appropriate preparatory reading.

Advice and guidance on compiling the report will form the bulk of the third seminar (7 July), alongside a de-brief of the site itself. The unit includes an hour of individual supervision from one Tutor for each student, which will normally be conducted at the excavation.

Students will work with the tutors and experienced staff members at OAE who will ensure that, whilst on the project, a range of practical skills that will meet the intended learning outcomes are taught and executed. These areas of work will normally include:-

- Hand-excavation techniques
- Hand-recovery of finds
- Hand-excavation of deposits
- Recognition of stratigraphic units and sequences
- Recording of stratigraphic units
- Drawing plans and sections
- Soil Sampling
- Excavation survey techniques
- Excavation photography

Each student is responsible for compiling a report. This should include comprehensive background on the site, the project's aims and methods and, where possible, the findings and conclusions of the research undertaken at the time of study, all illustrated with copies of examples, as appropriate, of the student's own site notes, photographs and, or, drawings. The report should demonstrate understanding of the reasons for the project, how the project addresses its aims, and an evaluation of progress on those aims during the course of the student's participation.

Provisional timetable

Session	**Date**	**Content**
Seminar 1	Saturday 14 April	Introduction to excavation projects – justification and/or requirement for the work, research design/WSI, choice of methods and techniques, levels of preservation and an introduction to the site

Seminar 2	Saturday 19 May	Practical Application – skills and processes of investigation and recording, what can be expected during the fieldwork experience and preparation guidance
Seminar 3	Saturday 7 July	Reporting – fieldwork de-brief, advice and guidance on the production of the report.

Learning outcomes

As a result of the unit, within the constraints of the time available, students should be able to:

- an understanding of how field research, and excavation in particular, is justified, designed, and conducted;
- the ability to make a meaningful contribution to the practical aims of the project using the methods employed at the time by the OAE archaeologists; and ability to explain the rationale for those methods and evaluate their appropriateness;
- the ability to explain the project on which they worked in the present context of the region's archaeology; and to evaluate the aims of the project against the outcomes achieved at the time through a review of published material, participation in the project and appraisal of the methods used.

Student assessment

Students undertake background reading before starting the fieldwork, including study of the research design or project design, in order to gain sufficient understanding for critical analysis. The report will form the main means of assessment. It should be between 3,000 and 4,000 words and should include reproductions of drawings, photographs, site plans, maps etc. to provide an illustrated account of the site and the project. As appropriate, copies of drawings and notes or context sheets and other examples of the student's own work of recording should be included, accompanied by critical assessment of the activity, and the issues and evidence that were the focus of the work. The report should demonstrate familiarity with the site's context and the project's aims and methods. It should show ability critically to assess them. The site director or supervisor will be asked to complete a form that provides an account of activities undertaken.

Students who have agreed a less physically demanding (non-digging) pathway to complete the practical component will necessarily need to submit an assignment that documents the other tasks delivered and skills utilised, whether this is based around survey work, finds analysis, illustration, data analysis and/or research or any combination of these. This should include, as appropriate, plans, drawings, registers and catalogues, descriptions of methods used, results of analysis and interpretation, critical analysis and description of processes delivered and of outcomes. The report should explain the context, role and value to the wider research design of the processes conducted, and should contextualise results and interpretation within the aims and outcomes of the field project itself.

Special requirements

It is the student's responsibility to:

- undertake appropriate background research on the project in advance;
- fulfil the minimum total of two continuous weeks of practical work; and
- compile the report.

Closing date for the submission of assignments: Monday 30 July 2018 by 12.00 (noon) BST

Reading and resource list

Barker, P, *Techniques of archaeological excavation* (3rd ed.), Routledge 1993

Bowden, M (ed.), *Unravelling the landscape: an inquisitive approach to archaeology*, Tempus 1999

Green, K & Moore, T, 2010, *Archaeology: An Introduction* (5th edition), Routledge 2010

Harris, E, *Principles of Archaeological Stratigraphy*, Academic Press 1979 (and now a free download from http://www.harrismatrix.com/index.html)

Institute for Archaeologists, *Standard and Guidance for archaeological field evaluation*, CIfA 2014 (Accessible via http://www.archaeologists.net/codes/cifa)

Institute for Archaeologists, *Standard and Guidance for archaeological field excavation*, CIfA 2014 (Accessible via http://www.archaeologists.net/codes/cifa)

Medlycott, M (ed.), *Research and Archaeology Revisited: a revised framework for the East of England*, EAA 2011. (Accessible via http://www.eaareports.org.uk/)

Museum of London, Archaeological site manual, Roskams 2001

Other sources

Aston, M, *Interpreting the Landscape*, Batsford 1985

Collis, J, *Digging up the past: an introduction to archaeological excavation*, Sutton 2001

Gater, J & Gaffney, C, *Revealing the buried past: Geophysics for archaeologists*, Tempus 2003

O'Connor, T & Evans, J, *Environmental Archaeology: Principles and Methods*, Sutton, 2005

Orton, C, *Pottery in Archaeology* (Cambridge Manuals in Archaeology) 2013

Reitz, E & Shackley, M, *Environmental Archaeology (Manuals in Archaeological Method, Theory and Technique)*, Springer 2013

TIMETABLE

Michaelmas 2017	
The science of the past	
Day-school one	07/10/2017
Day-school two	28/10/2017
Day-school three	18/11/2017
Day-school four	09/12/2017
Lent 2018	
Making sense of artefacts	
Day-school one	13/01/2018
Day-school two	27/01/2018
Day-school three	24/02/2018
Day-school four	10/03/2018
Day-school five	24/03/2018
Easter 2018	
Practical archaeological excavation and survey	
Seminar one	14/04/2018
Seminar two	19/05/2018
Seminar three	07/07/2018

Assignment submission dates are normally 3 weeks after final teaching session of term.

Whilst every effort is made to avoid changes to this programme, published details may be altered without notice at any time. The Institute reserves the right to withdraw or amend any part of this programme without prior notice.

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