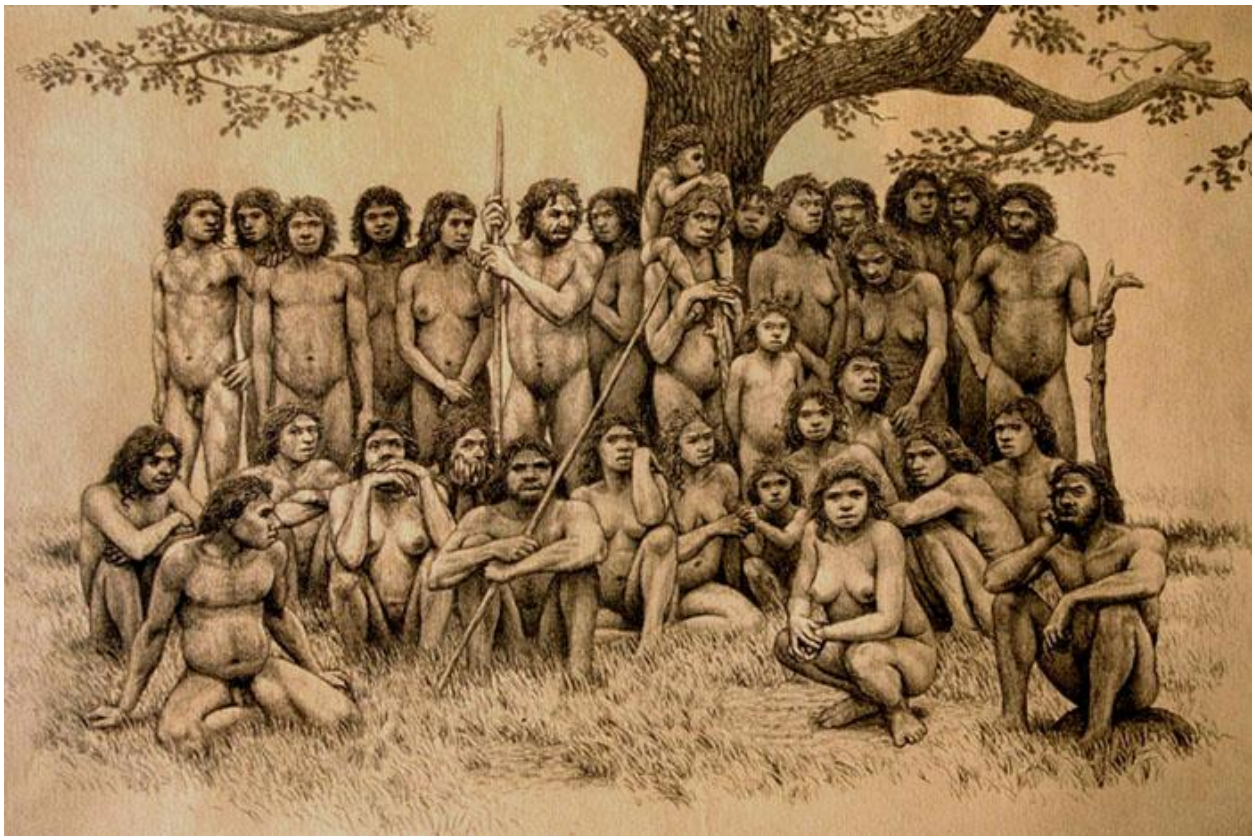
UCL - INSTITUTE OF ARCHAEOLOGY

ARCLG271
THE ARCHAEOLOGY OF EARLY HUMAN ORIGINS

2013-2014

15 credits



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1- OVERVIEW

Short description

The course is aimed to provide a detailed account of the Palaeolithic archaeological record associated with the evolution of pre-modern humans in Africa and Eurasia. The course will cover the subject through exploration of the history of Palaeolithic archaeology, as well as the technological, taphonomic and theoretical frameworks necessary to a critical understanding of the archaeological record of human evolution. The following session are planned

4 October: Session 1: Introduction to the course.
A behavioural approach to human origins.

11 October: Session 2: Non-Human Tool Use, First stone tool industries.

18 October: Session 3: Oldowan and Developed Oldowan technology and sites

25 October: Session 4: The Acheulean: origins and spread

1 November: Session 5: Timing and Nature of Dispersal From Africa.

*** 9 November: Reading week, no teaching**

15 November: Session 6: Archaeology of Homo Heidelbergensis at Boxgrove.

22 November: Session 7: Neanderthal adaptations In Eurasia

29 November: Session 8: The Occupation Record of the Near East
Presentations

8 December: Session 9: Museum Visit

13 December: Session 10: Origins of the Middle Stone Age Archaeology in Africa

**** 8 December: Deadline for submitting the essay ****

FIVE TOP READINGS FOR THE ENTIRE COURSE

Barham, L. & Mitchell, P. J. 2008. *The First Africans. African Archaeology from the earliest toolmakers to most recent foragers*. Cambridge: Cambridge University Press. INST ARCH DC 100 BAR (5 copies)

Isaac, G. L. 1989. *The archaeology of human origins*. Cambridge University Press, Cambridge. (INST ARCH BB 1 ISA & ISSUE DESK IOA ISA)

Lewin, R. 1987. *Bones of Contention*. University of Chicago Press, Chicago. (INST ARCH BB 1 LEW, there are at least 7 copies in the IoA Library)

McBrearty, S. & Brooks, A. S. 2000. The revolution that wasn´t: a new interpretation of the origin of modern human behavior. *Journal of Human Evolution*, 39: 453-563. Available electronically via UCL computers.

Plummer, T. 2004. Flaked Stones and Old Bones: Biological and Cultural Evolution at the Dawn of Technology. *Yearbook of Physical Anthropology*, 47: 118-164. (Available online)

GENERAL TEXTS

Anton, S. C. & Swisher III, C. C. 2004. Early Dispersals of *Homo* from Africa. *Annual Review of Anthropology*, 33: 271-296. Available online.

Barham L. & Mitchell P. (2008) *The First Africans*. Cambridge University Press. (Arch: DC 100 BAR)

Bermúdez de Castro, J.M. et al 2004. The Atapuerca Sites and Their Contribution to the Knowledge of Human Evolution in Europe. *Evolutionary Anthropology* 13, 25-41. Anthro Pers and also available online

Blumenschine, R. J. & Masao, F. T. 1991. Living sites at Olduvai Gorge, Tanzania? Preliminary landscape archaeology results in the basal Bed II lake margin zone. *Journal of Human Evolution*, 21: 451-462. TC 3472 and Anthro Pers

Boesch, C. & Boesch-Achermann, H. (2000). *The Chimpanzees of the Taï Forest. Behavioural Ecology and Evolution*. Oxford: Oxford University Press.

Boyd, R. & Silk, J. B. 2003. *How Humans Evolved*. Norton, 3rd Edition. New York. (Science short loan collection BOY)

Carbonell, E. et al 2008. The first hominin of Europe. *Nature* 452, 465-469. Available online

Conard N.J. (ed.) (2006) *When Neanderthals and modern humans met.* Tübingen: Kerns. (Arch: BB 1 CON; Issue Desk CON 12)

Davidson, I. & McGrew, W. C. 2005. Stone tools and the uniqueness of human culture. *Journal of the Royal Anthropological Institute*, 11: 793-817. (Available online)

Dennell, R. W. & Roebroeks, W. 2005. An Asian perspective on early human dispersal from Africa. *Nature* 438, 1099-1104. Inst Arch TC 3379 and available online

Finlayson, C.; et al 2006. Late survival of Neanderthals at the southernmost extreme of Europe. *Nature*, 443: 850-853. Available online

Foley R. & Lahr M.M. (1997) Mode 3 Technologies and the evolution of Modern Humans. *Cambridge Archaeological Journal* 7: 3-36. (Online)

Gallay, A. (ed.) 1999. *Comment l´homme? A la découverte des premiers Hominidés d´Afrique de l´Est*. Editions Errance, Paris. (INST ARCH DCD Qto GAY)

Gamble, C. 1999. *The Palaeolithic societies of Europe*. Cambridge University Press, Cambridge. (chapters 4 and 5). INST ARCH DA120 GAM (ISSUE DESK)

Harris, J. W. K., Braun, D. R. & Pante, M. (2007). 2.7 MYR-300,000 years ago in Africa. In (D. Pearsall, Ed.) *Encyclopedia of Archaeology*. New York: Academic Press, 63-72. Available online

Henshilwood C.S. & d'Errico F. (2005) Being modern in the Middle Stone Age: individuals and innovation. In C. Gamble & M. Porr (eds.) *The Individual hominid in context.* Abingdon, Routledge. (Arch: BB 1 GAM)

Klein, R. G. 2009. *The Human Career: Human Biological and Cultural Origins. 3rd edition*. Chicago University Press, Chicago. (INST ARCH BB 1 KLE)

Klein, R. 2000. Archeology and the Evolution of Human Behavior. *Evolutionary Anthropology* 9, 17-36. Available online

Lewin R & Foley, R. 2004. *Principles of Human Evolution*. Oxford, Blackwell INST ARCH LEW (ISSUE DESK)

Potts, R. 1996. *Humanity´s descent. The consequences of ecological instability*. New York. ANTHROPOLOGY B 30 POT

Roche, H., Blumenschine, R. J. & Shea, J. J. (2009). Origins and Adaptations of Early *Homo*: What Archeology Tells Us. In (F. E. Grine, J. G. Fleagle & R. E. Leakey, Eds.) *The First Humans: Origins and Early Evolution of the Genus Homo*. Dordrecht: Springer, 135-147. Available online

Schick, K. D. and N. Toth 1993. *Making Silent Stones Speak. Human Evolution and the Dawn of technology*. London, Weindenfeld and Nicolson. IoA BC 120 SCH

Methods of Assessment

The course will be assessed by a seminar presentation, of which a handout must be submitted (20% of the course mark), and one 3,500 word essay which counts for 80% of the course mark. The topics and deadlines for each assessment are specified below.

Teaching methods

This course will involve 10 lectures (10 hours), two practical classes and 10 seminars (10 hours). The seminars will be based on individual presentations of papers on the reading list and a resulting discussion.

Workload

There will be 20 hours of lectures which will include disscussion. Students are expected to undertake around 12 hours per week of reading.

Prerequisites

This course does not have prerequisites.

2- AIMS, OBJECTIVES AND ASSESSMENT

Aims & objectives

This course aims to provide students with:

1) A detailed account of the early human archaeological record.
2) The ability to be able to review and critically appraise a wide range of primary and secondary sources and data relating to early human behavior.
3) To examine the methodological and analytical tools and theoretical models which have been used in reconstructing the human evolutionary past from the archaeological record.

Learning outcomes

On successful completion of the course, students should demonstrate:

1) A detailed knowledge of human behavioural evolution.
2) A critical ability to interpret the archaeological record of human evolution through analysis and discussion of context, behaviour and technology.
3) Expansion of written and oral skills in communicating complex ideas and data-sets derived from a range of academic disciplines.
4) Ability to critically evaluate evidence and arguments regarding issues in Palaeolithic archaeology.

<u>Coursework</u>

Assessment

20% of the course will be assessed by a seminar presentation. To make it easier for the other examiners (secondary and external), students should print out the powerpoints with just 2 images per page (so any text on the images can be easily read), and write a few lines or notes on each image in a separate word-file. That gives a bit more space for notes if needed.

80% of the course will be assessed by **one essay** of c. **3,500 words** (min 3,325- max 3,675) length (excluding bibliography). **The subject area should be agreed with the Course Coordinator.**.

If students are unclear about the nature of an assignment, they should discuss this with the Course Coordinator. Students are not permitted to re-write and re-submit essays in order to try to improve their marks. However, students may be permitted, in advance of the deadline for a given assignment, to submit for comment a brief outline of the assignment. The Course Co-ordinator is willing to discuss an outline of the student's approach to the assignment, provided this is planned suitably in advance of the submission date.

Word-length

Strict new regulations with regard to word-length have been introduced UCL-wide with effect from the 2010-11 session. If your work is found to be between 10% and 20% longer than the official limit you mark will be reduced by 10%, subject to a minimum mark of a minimum pass, assuming that the work merited a pass. If your work is more than 20% over-length, a mark of zero will be recorded.

The following should not be included in the word-count: bibliography, appendices, and tables, graphs and illustrations and their captions.

Submission procedures

Students are required to submit hard copy of all coursework to the course coordinators pigeon hole via the Red Essay Box at Reception by the appropriate deadline. The coursework must be stapled to a completed coversheet (available from the web, from outside Room 411A or from the library)

Please note that new, stringent penalties for late submission have been introduced UCL-wide from 2010-11. Late submission will be penalized in accordance with these regulations unless permission has been granted and an Extension Request Form (ERF) completed.

Date-stamping will be via 'Turnitin' (see below), so in addition to submitting hard copy, students must also submit their work to Turnitin by the midnight on the day of the deadline.

Students who encounter technical problems submitting their work to Turnitin should email the nature of the problem to ioa-turnitin@ucl.ac.uk in advance of the deadline in order that the Turnitin Advisers can notify the Course Coordinator that it may be appropriate to waive the late submission penalty.

If there is any other unexpected crisis on the submission day, students should telephone or (preferably) e-mail the Course Coordinator, and follow this up with a completed ERF

Please see the Coursework Guidelines on the IoA website (or your Degree Handbook) for further details of penalties.

http://www.ucl.ac.uk/archaeology/administration/students/handbook/submission

The Turnitin 'Class ID' for this course is **611904** and the 'Class Enrolment Password' is **IoA1314**. Further information is given on the IoA website. Turnitin advisors will be available to help you via email: ioa-turnitin@ucl.ac.uk if needed.

UCL-WIDE PENALTIES FOR LATE SUBMISSION OF COURSEWORK

• The full allocated mark should be reduced by 5 percentage points for the first working day after the deadline for the submission of the coursework or dissertation.

• The mark will be reduced by a further 10 percentage points if the coursework or dissertation is submitted during the following six calendar days.

• Providing the coursework is submitted before the end of the first week of term 3 for undergraduate courses or by a date during term 3 defined in advance by the relevant Master's Board of Examiners for postgraduate taught programmes, but had not been submitted within seven days of the deadline for the submission of the coursework, it will be recorded as zero but the assessment would be considered to be complete.

• Where there are extenuating circumstances that have been recognised by the Board of Examiners or its representative, these penalties will not apply until the agreed extension period has been exceeded.

Timescale for return of marked coursework to students

You can expect to receive your marked work within four calendar weeks of the official submission deadline. If you do not receive your work within this period, or a written explanation from the marker, you should notify the IoA's Academic Administrator, Judy Medrington.

Keeping copies

Please note that it is an Institute requirement that you retain a copy (this can be electronic) of all coursework submitted. When your marked essay is returned to you, you should return it to the marker within two weeks.

CITING OF SOURCES

Coursework should be expressed in a student's own words giving the exact source of any ideas, information, diagrams etc. that are taken from the work of others. Any direct quotations from the work of others must be indicated as such by being placed between inverted commas. **Plagiarism is regarded as a very serious irregularity which can carry very heavy penalties.** It is your responsibility to read and abide by the requirements for presentation, referencing and avoidance of plagiarism to be found in the IoA 'Coursework Guidelines' on the IoA website
http://www.ucl.ac.uk/archaeology/administration/students/handbook

There are strict penalties for plagiarism. Further details are available on the IoA website.

AVOIDING PLAGIARISM

The term “plagiarism” means presenting material (words, figures etc.) in a way that allows the reader to believe that it is the work of the author he or she is reading, when it is in fact the creation of another person.

In academic and other circles, plagiarism is regarded as theft of intellectual property. UCL regulations, all detected plagiarism is to be penalized and noted on the student’s record, irrespective of whether the plagiarism is committed knowingly or unintentionally. The whole process of an allegation of plagiarism and its investigation is likely to cause considerable personal embarrassment and to leave a very unpleasant memory in addition to the practical consequences of the penalty. The penalties can be surprisingly severe and may include failing a course or a whole degree. It is thus important to take deliberate steps to avoid any inadvertent plagiarism.

Avoiding plagiarism should start at the stage of taking notes. In your notes, it should be wholly clear what is taken directly from a source, what is a paraphrase of the content of a source and what is your own synthesis or original thought. Make sure you include sources and relevant page numbers in your notes.

When writing an essay any words and special meanings, any special phrases, any clauses or sentences taken directly from a source must be enclosed in inverted commas and followed by a reference to the source in brackets. It is not generally necessary to use direct quotations except when comparing particular terms or phrases used by different authors. Similarly, all figures and tables taken from sources must have their origin acknowledged in the caption. Captions do not contribute to any maximum word lengths.

Paraphrased information taken from a source must be followed by a reference to the source. If a paragraph contains information from several sources, it must be made clear what information comes from where: a list of sources at the end of the paragraph is not sufficient. Please cite sources of information fully, including page numbers where appropriate, in order to avoid any risk of plagiarism: citations in the text do not contribute to any maximum word count.

To guard further against inadvertent plagiarism, you may find it helpful to write a plan of your coursework answer or essay and to write the coursework primarily on the basis of your plan, only referring to sources or notes when you need to check something specific such as a page number for a citation.

COLLUSION, except where required, is also an examination offence. While discussing topics and questions with fellow students is one of the benefits of learning in a university environment, you should always plan and write your coursework answers entirely independently.

SUBMISSION OF COURSEWORK

The **absolute deadline** for submission will be:

8 December 2012 for the essay and the presentation handout

Teaching schedule

Lectures will be held 11:00 am-1:00 pm on Fridays in the Autumn term, in room 410 at the Institute of Archaeology.

SYLLABUS

The following is an outline for the course as a whole, and identifies essential and supplementary readings relevant to each session. Information is provided as to where in the UCL library system individual readings are available; their location and Teaching Collection (TC) number, and status (whether out on loan) can also be accessed on the *eUCLid* computer catalogue system.

Please note that, from September 2006, in line with wider UCL Library Services policies, it is not possible to add paper copies of articles that are available in electronic format (from electronic journals) to the Institute of Archaeology Library teaching collection. This is in response to changes in the CLA licence terms for electronic material held by UCL Library Services and is non-negotiable. Instead, students should use the electronic versions of articles. Therefore, many of the most important articles for your reading lists will be only available in electronic format. Access to such articles is granted via UCL computers.

Shelf marks relate to Archaeology library unless otherwise indicated. Note that many of the books are available behind desk on short loan. Some books are available in both Archaeology and Science libraries (check catalogue). TC = Teaching collection, Anth = Anthropology, Per = Periodical.

4th October:
Session 1: Introduction: Timescales, and Behavioural approaches.

In this session we discuss the course in overview looking at it's themes and timescales. The environmental context of human evolution is presented and the role behaviour played in the development of the genus Homo is discussed in relation to ecological and social adaptation. The perspective of a behavioural archaeology of Homo and our primate ancestors is proposed and the relationship between diet, anatomy and technology explored.

READINGS:
deMenocal, P. B. 2011. Climate and Human Evolution. *Science* 331, 540-542. Available online

Maslin, M. A. & Christensen, B. 2007. Tectonics, orbital forcing, global climate change, and human evolution in Africa: introduction to the African paleoclimate special volume. *Journal of Human Evolution* 53, 443-464. Available online

Kingston, J. D. 2007. Shifting Adaptive Landscapes: Progress and Challenges in Reconstructing Early Hominid Environments. *Yearbook of Physical Anthropology* 50, 20-58. Available online

Kullmer, O. 2007. Geological Background of Early Hominid Sites in Africa. In (W. Henke & I. Tattersall, eds.) *Handbook of Paleoanthropology*. Berlin: Springer-Verlag, 339-356. Available online via Springer books.

O'Brien, E. M. & Peters, C. R. 1999. Landforms, Climate, Ecogeographic Mosaics, and the Potential for Hominid Diversity in Pliocene Africa. In T. G. Bromage & F. Schrenk (ed.): *African Biogeography, Climate Change, and Early Hominid Evolution*. Oxford: Oxford University Press, 115-137. (TC 3471, and Anthropology, Q12 Bro)

FURTHER READING:

Andrews, P. & Humphrey, L. 1999. African Miocene Environments and the Transition to Early Hominines. In T. G. Bromage & F. Schrenk (ed.): *African Biogeography, Climate Change, and Early Hominid Evolution*. Oxford: Oxford University Press, 282-300. (Anthropology, Q12 Bro)

Behrensmeyer, A. K. 1982. The geological context of human evolution. *Annual Review of Earth Planetary Sciences*, 10: 39-60. Available via Jstor

Butzer, K. W. 1982. The Palaeo-ecology of the African Continent. The Physical Environment of African from Earliest Geological to Later Stone Age Times. In J.D. Clark (ed.): *Cambridge History of Africa. Volume 1. From the Earliest Times to c500 BC*. Cambridge: Cambridge University Press, 1-69. (INST ARCH DC 100 Series CAM 1)

Denton, G. H. 1999. Cenozoic Climate Change. In T. G. Bromage & F. Schrenk (ed.): *African Biogeography, Climate Change, and Early Hominid Evolution*. Oxford: Oxford University Press, 94-114. (Anthropology, Q12 Bro)

Mohr, P. A. 1991. The Discovery of African Rift Geology: A Summary. In A.B. Kampunzu & R.T. Lubala (ed.): *Magmatism in Extensional Structural Settings: the Phanerozoic African Plate*. Berlin: Heidelberg, Springer, 11-22. Not at UCL.

Owen-Smith, N. 1999. Ecological Links between African Savanna Environments, Climate Change, and Early Hominid Evolution. In T. G. Bromage & F. Schrenk (ed.): *African Biogeography, Climate Change, and Early Hominid Evolution*. Oxford: Oxford University Press, 138-149. (Anthropology, Q12 Bro)

Potts, R. 1998. Environmental hypotheses of hominin evolution. *Yearbook of Physical Anthropology*, 41: 93-136. (Anthro Pers and available online)

Schlüter, T. 1997. *Geology of East Africa*. Borntraeger, Berling. (GEOLOGY QP 5 SCH)

Sepulchre, P.; Ramstein, G.; Fluteau, F.; Schuster, M.; Tiercelin, J. J. & Brunet, M. 2006. Tectonic Uplift and Eastern Africa Aridification. *Science*, 313: 1419-1423. (Available online)

Reed, K. E. 1997. Early hominid evolution and ecological change through the African Plio-Pleistocene. *Journal of Human Evolution*, 32: 289-322. (Anthro-Pers and also available on line)

Trauth, M. H., Larrasoaña, J. C. & Mudelsee, M. 2009. Trends, rhythms and events in Plio-Pleistocene African climate. *Quaternary Science Reviews* 28, 399-411. Available online

11th October
Session 2: Non-Human Tool Use, First stone tool industries.

In this lecture we will consider the nature of tool use in other species and focus on it's expression in other primates. We will consider the implication for archaeology and the methods suitable for the investigation of early tool concentrations. The ecological and evolutionary context of stone tool use will be discussed and associated evidence from faunal remains critically assessed. Further to this, the evidence for the earliest use of stone tools technology will be discussed.

READINGS:

Davidson, I. & McGrew, W. C. 2005. Stone tools and the uniqueness of human culture. *Journal of the Royal Anthropological Institute*, 11: 793-817. (Available online)

Delagnes, A. & Roche, H. 2005. Late Pliocene hominid knapping skills: The case of Lokalalei 2C, West Turkana, Kenya. *Journal of Human Evolution*, 48: 435-472. Available online and INST ARCH TC 3402

Harris, J. W. K. 1983. Cultural beginnings: Plio-Pleistocene archaeological occurrences from the Afar, Ethiopia. *The African Archaeological Review*, 1: 3-31. (Inst Arch Pers)

Haslam, M., Hernandez-Aguilar, A., Ling, V., Carvalho, S., Torre, I. d. l., DeStefano, A., Du, A., Hardy, B., Harris, J., Marchant, L., Matsuzawa, T., McGrew, W., Mercader, J., Mora, R., Petraglia, M., Roche, H., Visalberghi, E. & Warren, R. (2009). Primate archaeology. *Nature* 460, 339-344. Available online

Heinzelin, J. de; Clark, J. D.; White, T.; Hart, W.; Renne, P.; WoldeGabriel, G.; Beyene, Y. & Vrba, E. 1999. Environment and Behavior of 2.5-million-year-Old Bouri Hominids. *Science*, 284: 625-629. Inst Arch. TC 3305

Kibunjia, M. 1994. Pliocene archaeological occurrences in the Lake Turkana Basin, Kenya. *Journal of Human Evolution*, 27: 157-171. (Anthro-Pers)

Kortlandt, A. 1986. The Use of Stone Tools by Wild-living Chimpanzees and Earliest Hominids. *Journal of Human Evolution*, 15: 77-132. (Anthr-Per)

Marchant, L. F. & McGrew, W. C. 2005. Percussive Technology: Chimpanzee Baobab Smashing and the Evolutionary Modelling of Hominin Knapping. In Valentine Roux & B. Bril (ed.): *Stone knapping. The necessary conditions for a uniquely hominin behaviour*. Cambridge: McDonald Institute Monographs, 341-350. (INST ARCH KA ROU)

McGrew, W. C. 1992. *Chimpanzee Material Culture: Implications for Human Evolution*. Cambridge University Press, Cambridge. (Inst Arch BB 3 MCG)

McGrew, W. C. (2010). Chimpanzee Technology. *Science* 328, 579-580. Available online

McPherron, Z Alemseged, CW Marean, JG Wynn. (2010) Evidence for stone-tool-assisted consumption of animal tissues before 3.39 million years ago at Dikika, Ethiopia. Nature, 201. Available On Line

Mercader, J.; Panger, M. A. & Boesch, C. 2002. Excavation of a Chimpanzee Stone Tool Site in the African Rainforest. *Science*, 296: 1452-1455. Available online and Science Library.

Mercader, J. et al 2007. 4,300-Year-old chimpanzee sites and the origins of percussive stone technology. *Proc. Natl. Acad. Sci.* 104, 3043-3048. Available online

Ottoni, E. B. & Izar, P. 2008. Capuchin Monkey Tool Use: Overview and Implications. *Evolutionary Anthropology* 17, 171-178. Available online

Panger, M. A.; Brooks, A. S.; Richmond, B. G. & Wood, B. 2002. Older Than the Oldowan? Rethinking the Emergence of Hominin Tool Use. *Evolutionary Anthropology*, 11: 235-245. Inst Arch. TC 3306

Quade, J.; Levin, N.; Semaw, S.; Stout, D.; Renne, P.; Rogers, M. J. & Simpson, S. 2004. Paleoenvironments of the earliest stone toolmakers, Gona, Ethiopia. *Geological Society of America Bulletin*, 116 (11-12): 1529-1544. IoA TC 3475 and GEOSCIENCE Pers.

Roche, H. 2005. From Simple Flaking to Shaping: Stone-knapping Evolution among Early Hominins. In Valentine Roux & B. Bril (ed.): *Stone knapping. The necessary conditions for a uniquely hominin behaviour*. Cambridge: McDonald Institute Monographs, 35-48. (INST ARCH KA ROU)

Roche, H.; et al 1999. Early hominid stone tool production and technical skill 2.34 Myr ago in West Turkana, Kenya. *Nature*, 399: 57-60. Inst Arch TC 2250

Schick, K. & Toth, N. 2006. An Overview of the Oldowan Industrial Complex: The sites and the nature of their evidence. In (N. Toth & K. Schick, Ed.) *The Oldowan: case studies into the earliest Stone Age* Gosport: Stone Age Institute, 3-42. Institute of Archaeology TC 3531

Semaw, S. 2000. The World´s Oldest Stone Artefacts from Gona, Ethiopia: Their Implications for Understanding Stone Technology and Patterns of Human Evolution Between 2.6-1.5 Million Years Ago. *Journal of Archaeological Science*, 27: 1197-1214. Inst Arch Pers and available online

Semaw, S.; et al. 2003. 2.6-Million-year-old stone tools and associated bones from OGS-6 and OGS-7, Gona, Afar, Ethiopia. *Journal of Human Evolution*, 45: 169-177. Anthro Pers and available online

Stout, D. et al 2005. Raw material selectivity of the earliest stone toolmakers at Gona, Afar, Ethiopia. *Journal of Human Evolution*, 48: 365-380. IoA TC3403 and available online

Stout, D., Semaw, S., Rogers, M. J. & Cauche, D. (2010). Technological variation in the earliest Oldowan from Gona, Afar, Ethiopia. *Journal of Human Evolution* 58, 474-491. Available online

Torre, I. de la 2011. The origins of stone tool technology in Africa: a historical perspective. Phil. Trans. R. Soc. B 366, 1028-1037. Available online

Visalberghi, E., Addessi, E., Truppa, V., Spagnoletti, N., Ottoni, E., Izar, P. & Fragaszy, D. 2009. Selection of Effective Stone Tools by Wild Bearded Capuchin Monkeys. *Current Biology* 19, 213-217. Available online

Whiten, A.; Goodall, J.; McGrew, W. C.; Nishida, T.; Reynolds, V.; Sugiyama, Y.; Tutin, C. E. G.; Wrangham, R. W. & Boesch, C. 1999. Cultures in chimpanzees. *Nature*, 399: 682-685. (TC 2247, also Available online)

Wynn, T. & McGrew, W. C. 1989. An ape's view of the Oldowan. *Man*, 24: 383-398. (Inst Arch TC 3401)

18th October: Session 3: Oldowan and Developed Oldowan technology and sites

In this session we shall examine the Oldowan and Developed Oldowan as technologies represented of early *Homo* in the east African rift valley system and the key locale of Olduvai Gorge. Technology and typological characteristics of the assemblage will be presented and the changing interpretation of its significance will be discussed.

READINGS

Blumenschine R. J. & Masao F.T. 1991. Living Sites at Olduvai Gorge, Tanzania? Preliminary landscape archaeology results in the basal Bed II lake margin zone. Journal of Human Evolution. 21: 451-462. (Online)

Leakey, M. D. (1971). Olduvai Gorge, volume 3: excavations in Beds I and II, 1960-1963. New York, Cambridge University Press.

Panger, M. a., A. S. Brooks, et al. (2002). "Older Than the Oldowan? Rethinking the Emergence of Hominin Tool Use." Evolutionary Anthropology **11**(6): 235-245.

Roche, H., A. Delagnes, et al. (1999). "Early hominid stone tool production and technical skill 2.34 Myr ago in West Turkana, Kenya." Nature **399**(6731): 57-60.

Semaw, S. (2000). "The World's Oldest Stone Artefacts from Gona, Ethiopia: Their Implications for Understanding Stone Technology and Patterns of Human Evolution Between 2·6–1·5 Million Years Ago." Journal of Archaeological Science **27**(12): 1197-1214.

Semaw, S. (2006). The oldest stone artifacts from Gona (2.6-2.5 Ma), Afar , Ethiopia : Implications for understanding the earliest stages of stone knapping. K. D. N. Toth and E. Schick. Gosport, Stone Age Institute Press**:** 43-75.

Semaw, S., M. J. Rogers, et al. (2003). "2.6-Million-year-old stone tools and associated bones from OGS-6 and OGS-7, Gona, Afar, Ethiopia." Journal of Human Evolution **45**(2): 169-177.

Semaw, S., P. Renne, et al. (1997). "2.5-million-year-old stone tools from Gona, Ethiopia." Nature **385**(6614): 333-336.

Stout, D., J. Quade, et al. (2005). "Raw material selectivity of the earliest stone toolmakers at Gona, Afar, Ethiopia." Journal of Human Evolution **48**(4): 365-380.

Stout, D., S. Semaw, et al. (2010). "Technological variation in the earliest Oldowan from Gona, Afar, Ethiopia." Journal of human evolution **58**(6): 474-491.

Torre, I. and R. Mora (2005). Technological strategies in the Lower Pleistocene at Olduvai Beds I & II. Liege, Etudes et Recherches Archeologiques de l'Universite de Liege.

Torre, I., R. Mora, et al. (2003). "The Oldowan industry of Peninj and its bearing on the reconstruction of the technological skills of LowerPleistocene hominids." Journal of Human Evolution **44**(2): 203-224.

Torre, Alfonso Benito-Calvo, Adrian Arroyo, Andrea Zupancich, Tomos Proffitt, Experimental protocols for the study of battered stone anvils from Olduvai Gorge (Tanzania), *Journal of Archaeological Science*, Available online 28 August 2012, ISSN 0305-4403, 10.1016/j.jas.2012.08.007.

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25 October: Session 4: Acheulean Technology and Landscapes

After 1.8 million years ago new technologies focused on the production of broadly symmetrical and elongated large cutting tools appears. The Handaxes or bifaces of the Acheulean appear to represent a technological innovation hinting at conceptual changes in the understanding of surfaces and volume. Acheulean technologies are associated broadly with changes in landscape-use and have distribution patterns characterised as much by areas and periods where they don't appear as they are by their long-lived 1.7million appearance in the archaeological record. The function, technology and evolutionary significance of this technology is discussed.

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1 November: Session 5: Timing and Nature of Dispersal From Africa.

Europe provides an important data set to understand the nature of and limitations upon patterns of early dispersal. In this session the background of the early human record of Europe is introduced in a historical perspective. The background to early human dispersals from Africa across the old world are explored with the emphasis on seeing the colonisation of Europe as part of a wider process, with a still poorly understood chronology for much of the Asian land mass.

The evidence for early human dispersal into Europe is presented as a possible two phase process, with early evidence for human occupation in south west Europe from 1.2million years ago but only established occupation across the whole continent from 0.6million years ago.

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15 November: Session 6: Archaeology of *Homo heidelbergensis* at Boxgrove.

Homo Heidelbergensis is a key hominin species due to it's pivotal position as the accepted last common ancestor on the Neanderthal lineage and our own species. The Lower Palaeolithic site of Boxgrove provides one of the most lucid and detailed records of the behaviour of Heidelbergensis. In this lecture this record will be examined in relation to other important Lower Palaeolithic sites from Middle Pleistocene Europe. The data sets of stone tool and faunal remains will be discussed in order to present observations on the hunting behaviour, technology and landscape use of this species.

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22 November: Session 7: Neanderthal Origins and Behaviour In Europe

The Neanderthal record of Europe and Western Asia provide one of the key sequences of hominin adaptation in the Pleistocene. The exceptional record of these population stems from an intensive and long established research history originating in the 19th century and has seen focused and sustained research in recent decades. The Neanderthals provide an example of physical and adaptive specialisation to northern latitudes. In this lecture, the behavioural origins, development and eventual disappearance of the Neanderthals will be presented in terms of the evolutionary path.

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29 November: Session 8: The Occupation Record of the Near East

The Near East constitutes a key region for the study of Lower and Middle Palaeolithic behaviour in a landscape which offered unique resources and routeways between Africa and Europe. In this lecture the archaeological record of Homo Erectus/Ergaster, Neanderthal and early Anatomically Modern Humans will be discussed with relation to cave and open air sequences.

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8th December: Session 9: Museum Visit

We shall spend the afternoon at the British Museum prehistory department looking at artefacts from key British Palaeolithic sites. The material will include Lower and Middle Palaeolithic technology as well as collections of material from Boxgrove.

Travel details will be discussed in Session 8.

13 December: Session 10: Middle Stone Age Archaeology in Africa

During the Middle Pleistocene new evolutionary pulses gave place to the emergence of anatomically modern humans. At the present, most research locates Africa as the birthplace of *Homo sapiens*. In this seminar we will discuss the evolutionary and behavioural implications of the emergence of *Middle Stone Age archaeology*, and will assess similarities and differences with previous and later archaeological sequences in Africa and elsewhere.

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4- ONLINE RESOURCES

The full UCL Institute of Archaeology coursework guidelines are given here: http://www.ucl.ac.uk/archaeology/handbook/common/marking.htm.
The full text of this handbook is available here (includes clickable links to Moodle and online reading lists if applicable) http://www.ucl.ac.uk/silva/archaeology/course-info/.

Moodle

There is a Moddle site for this course, please register to get access to online resources

5- ADDITIONAL INFORMATION

Libraries and other resources

In addition to the Library of the Institute of Archaeology, other libraries in UCL with holdings of particular relevance to this degree are Anthropology and Sciences. Nowadays many of the relevant resources for this course are available in the internet. Please devote some time to navigate into e-resources such as JStor and several international journals whose access is granted via UCL computers.

Attendance

A register will be taken at each class. If you are unable to attend a class, please notify the lecturer by email. Departments are required to report each student's attendance to UCL Registry at frequent intervals throughout each term.

Information for intercollegiate and interdepartmental students

Students enrolled in Departments outside the Institute should collect hard copy of the Institute's coursework guidelines from Judy Medrington's office.

Dyslexia

If you have dyslexia or any other disability, please make your lecturers aware of this. Please discuss with your lecturers whether there is any way in which they can help you. Students with dyslexia are reminded to indicate this on each piece of coursework.

Feedback

In trying to make this course as effective as possible, we welcome feedback from students during the course of the year. All students are asked to give their views on the course in an anonymous questionnaire which will be circulated at one of the last sessions of the course. These questionnaires are taken seriously and help the Course Co-ordinator to develop the course. The summarised responses are considered by the Institute's Staff-Student Consultative Committee, Teaching Committee, and by the Faculty Teaching Committee.

If students are concerned about any aspect of this course we hope they will feel able to talk to the Course Co-ordinator, but if they feel this is not appropriate, they should consult their Personal Tutor, the Academic Administrator (Judy Medrington), or the Chair of Teaching Committee (Dr. Mark Lake).

HOW TO UPLOAD YOUR WORK TO TURNITIN

Note that Turnitin uses the term 'class' for what we normally call a 'course'.

1. Ensure that your essay or other item of coursework has been saved properly, and that you have the Class ID for the course (available from the course handbook or here:
   http://www.ucl.ac.uk/archaeology/studying/undergraduate/courses
   http://www.ucl.ac.uk/archaeology/studying/masters/courses
   and enrolment password (this is IoA1011 for all courses this session - note that this is capital letter I, lower case letter o, upper case A, number 1, zero, number 1, number 1)
2. Click on http://www.submit.ac.uk/static_jisc/ac_uk_index.html (NB Not www.turnitin.com, which is the US site) or copy this URL into your favourite web browser
3. Click on 'New user'
4. Click on 'Enrol as a student'
5. Create an account using your UCL or other email address. Note that you will be asked to specify a new password for your account - do not use your UCL password or the enrolment password, but invent one of your own (Turnitin will permanently associate this with your account, so you will not have to change it every 3 months unlike your UCL password). Once you have created an account you can just log in at http://www.submit.ac.uk and enrol for your other classes without going through the new user process again.
6. You will then be prompted for the Class ID and enrolment password
7. Click on the course to which you wish to submit your work.
8. Click on the correct assignment.
9. Double-check that you are in the correct course and assignment and then click 'Submit'
10. Attach document

If you have problems, please email the Turnitin Advisers on ioa-turnitin@ucl.ac.uk, explaining the nature of the problem and the exact course and assignment involved.

One of the Turnitin Advisers will normally respond within 24 hours, Monday-Friday during term. Please be sure to email the Turnitin Advisers if technical problems prevent you from uploading work in time to meet a submission deadline - even if you do not obtain an immediate response from one of the Advisers they will be able to notify the relevant Course Coordinator that you had attempted to submit the work before the deadline.