Reduction and the production of symmetry on a Boxgrove handaxe. (M. Leyroyer 2015).

ARCL 3046: LITHIC TECHNOLOGY
Handbook
Year 2/3 option. 0.5 Unit
Turnitin password: IoA1516 Turnitin code: 2970204
Co-ordinator & teacher: Mark Roberts mark.roberts@ucl.ac.uk
Room 307
Tel: 0207 679 7535 (London): Tel: 01903 773915(Sussex)
COURSE SYLLABUS

Lecturer: Mark Roberts

Week 1
13th Jan
Practical: The IoA’s 410 lithic collection.

Week 2
Lecture: Terminology, technology and typological attributes of stone tools.
20th Jan
Practical: Handling session. Identifying lithics and their diagnostic characteristics.

Week 3
Lecture: The Chaîne Opératoire and further lithic typology.
27th Jan
Practical: Handling session. An examination of the pre-handaxe industries of the Oldowan and Clactonian followed by Acheulean handaxes.

Week 4
Lecture: The Middle Palaeolithic.
3rd Feb
Practical: Discussion of the Chaîne Opératoire diagram and a Levallois and Middle Palaeolithic handling session

Week 5
Lecture: Syn-depositional and post-depositional factors affecting lithic assemblages.
10th Feb
Practical: Handling session. Upper Palaeolithic stone tools and technology.

Week 6
15th -19th February READING WEEK

Week 7
Lecture: The Upper Palaeolithic and beyond.
24th Feb
Practical: Test 1 (Runs in four groups from 12.15-15.45).

Week 8
Lecture: Indirect percussion and pressure flaking.
2nd Mar

Week 9
Lecture: Discussion between MBR and knapping expert.
9th Mar
Practical: Knapping demonstration.

Week 10
Lecture: Later prehistoric tools from the Neolithic to the Iron Age and ground-stone artefacts.
16th Mar
Practical: Lithic reports.

Week 11
Lecture: Excavating and recording strategies for lithic assemblages and a brief introduction to the concept of style.
23rd Mar
Practical: Test 2 (Runs in four groups from 12.15 – 15.45).
ASSESSMENT
The course is assessed by two in-class observation/written tests each worth 25% of the final mark, and a critical analysis of a published lithic report, worth 50% of the final mark. The report should be 2500 words in length (see appendix).

Test 1 will be on Wednesday 24\textsuperscript{th} February 2016.
Test 2 will be on Wednesday 23\textsuperscript{rd} March 2016.

The final piece of assessed work for the course takes the form of a critical report:-

1/. Go to a journal containing a paper on an excavation with a substantial lithic report and critically assess the report. You will need to consider points such as:- How well does it stand on its own? How well does it integrate with the rest of the report? Is the information contained in it put over clearly and readily understood? Is it simply descriptive or does it develop the study of the stone tools, using intra and inter site data? Consider the illustrations and tables and how they contribute to both the lithic and overall report.

Hand in date Wednesday April 27\textsuperscript{th} 2016.

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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. Students are expected to attend at least 70\% of classes.

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 (411A).

Dyslexia
If you have dyslexia or any other disability, please make your Course Co-ordinators aware of this fact and discuss with them 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 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 approach is not appropriate, they should consult their Personal Tutor, the Academic Administrator (Judy Medrington), or the Chair of Teaching Committee.

Health and safety
The Institute has a Health and Safety policy and code of practice which provides guidance on field work, site visits, laboratory work etc. This policy is revised annually and the new edition will be issued in due course. All work undertaken in the Institute is governed by these guidelines, and students have a duty to be aware of them and to adhere to them at all times. This is particularly important in the context of the laboratory/field/placement work which will be undertaken as part of this course. Specific information pertaining to activities associated with this course shall be given prior to their undertaking.

INTRODUCTION TO THE COURSE
This course will train the student to recognise the characteristics of humanly modified lithics, to understand and interpret the techniques of their manufacture, and to comprehend their various uses. The course also studies stone tool assemblages from the perspective of the excavator and analyst, taking into account methodologies for extraction and interpretation and by looking at the taphonomic history of artefact assemblages. Finally, we shall examine the different ways we might interpret past human behaviour from the analysis of stone artefacts. Stone artefacts dominate the prehistoric archaeological record, are a significant component of the material cultural repertoire of later prehistoric and early historic societies, and are an extremely important and interesting area of archaeological research. We shall concentrate on ways in which we can approach the analysis and understanding of prehistoric technologies in particular but will also consider typological, functional, contextual and cognitive analysis of stone artefacts, and
examine the different ways we can build an understanding of past human behaviour from the
analysis of flaked stone and to a lesser extent ground stone tool assemblages. The Institute has
extensive stone tool reference material and we shall utilise prehistoric assemblages from Britain,
Europe and Africa, although material from other regions will be introduced when appropriate.

**Aims**
The specific aims of the course are to introduce you to:
- Methodological approaches used in the identification and analysis of stone artefacts.
- Ways in which stone artefacts can be and have been used to interpret the dynamic
  human past.
- The importance of stone artefacts as a source of information about past human
  behaviour.

**Objectives**
On successful completion of this course you should:-
- Understand the basic elements of the fracture mechanics of stone.
- Be aware of the range of information lithic assemblages provide on past human
  behaviour.
- Be familiar with the different approaches used in lithic stone analysis.
- Be able to illustrate lithic artefacts for study purposes.
- Be able to produce a report on or critique a lithic assemblage.

**Learning Outcomes**
On successful completion of the course students should have developed:
- Observational skills and critical reflection.
- The ability to apply acquired knowledge of a topic.
- Demonstrate a good understanding of the principles and methods by which lithic data
  are acquired and analysed.
- Show an awareness of the issues involved in planning, designing, and executing a
  specialist post-extraction report.

**Course Information**
The handbook contains the basic information about the content and administration of the course.
If necessary, additional subject-specific reading lists and individual session handouts will be
given out at appropriate points in the course. If you have queries about the objectives, structure,
content, assessment or organisation of the course, please contact me (MBR). This handbook is
also available on the Institute web-site & the course Moodle page.

**Teaching Methods**
The course is taught on a weekly basis in Term 2 by lectures and practical handling sessions.
Practical sessions have been incorporated into the scheduled sessions and follow on from the
lecture that runs between 11.00 and 12.00, with one group attending between 12.00 and 13.00
and the next group between 13.00 and 14.00.
Workload
There will be 20 hours of lectures and practical handling sessions in this course. The total workload for the course is 180 hours: you will be expected to undertake about 80 hours of reading for the course, plus about 80 hours preparing for and producing the assessed work.

Key readings
There are a number of books that provide a good introduction to lithic technology, terminology, and methods of analysis. If you are interested in lithic analysis, the Holdaway and Stern, Andrefsky, Odell and Inizan are good. For those of you who wish to try your hand at flint knapping, then Whittaker is a useful reference.


13th Jan Practical: The Institute’s lithic collection in Room 410.

Rocks vary in the manner in which they fracture and their suitability as raw material for stone tool manufacture, points that knappers in the past understood well. We will concentrate primarily on flint and other crypto-crystalline rocks, and the structural properties that make them highly suitable for knapping purposes. We will consider ways in which we can source the location of raw materials and what that information can tell us about past human behaviour. We will also study evidence for quarrying and transport of stone, and consider whether the type of stone available affected the manufacturing process. We will then identify the visible characteristics of knapped stone artefacts. We shall then consider the meaning of Glynn Isaac’s famous statement on Stone tools made back in 1977 and discuss its relevance today.

“Most Palaeolithic archaeologists ... tend to believe that the assemblages of humanly flaked stones that we recover in quantities from sites such as Olorgesailie preserve a great deal of valuable information about the craft traditions, the cultural affinities, and the economic life of
the hominids who made them. This belief is in part a matter of faith, and there is a danger that in our enthusiasm we may overextend the exegesis of stone artifacts. It sometimes appears that all of us treat stone artifacts as infinitely complex repositories of palaeocultural information and assume that it is only the imperfections of our present analytical systems that prevent us from decoding them. *But is this really so?*" (Glyn Issac. Olorgesailie, 1977:207)

See the papers given on the Moodle site.


**Week 2**  
**Lecture:** Terminology, technology and typological attributes of stone tools.  
**20th Jan**  
**Practical:** Identifying lithics and their diagnostic characteristics.

Louis Leakey famously referred to stone tools as “fossilized human behaviour.” In order to reconstruct ancient behaviour from these material remains it is necessary to collect detailed and accurate information about technologically relevant aspects of artefact typology, frequency, morphology and size. These include both qualitative and quantitative attributes. This lecture will introduce basic concepts and methods in lithic analysis, with special attention to the relevance of particular attributes to different research questions. In the practical the students will handle a range of raw materials ranging from obsidian to conglomerates, we shall then identify the visible characteristics of knapped stone artefacts.

**Essential Reading**


Inizan, M.-L., Roche, H. and Tixier, J., 1992. *Technology of Knapped Stone.* (Ch.5 Debitage; Ch.6. Retouching). Meudon: CREP. IOA ISSUE DESK: DA INI

**Further Reading**


Week 3  Lecture: The Chaîne Opératoire and further lithic typology.

27th Jan  Practical: An examination of the pre-handaxe industries of the Oldowan and Clactonian followed by Acheulean handaxes.

The concept of Chaîne Opératoire will be introduced and discussed. The course so far has enabled us to identify the various stages of a lithic reduction sequence. The sequence from start to finish is known as the Chaîne Opératoire and applies to any reduction sequence regardless of its technology, age or complexity. Within the Chaîne Opératoire, we have learnt about what types of raw material make the most effective stone tools and how to describe the physical attributes of both the end object of reduction (façonnage) and the waste products (débitage): related concepts of reduction sequence and tool histories will also be considered. The technology of manufacture through percussion - direct and applied which creates the physical attributes has been examined as has the typological subdivision of stone tools. We have discussed the problems of using typology as a dating method, with relation to diachronous geographical distribution of technologies and tool types; together with simple technique and type repetition within a more limited spatial distribution.

Outside of the class, students will draw-up the links in a chaîne opératoire, where the category boxes are given for different types of artefact: Next week in the practical class we shall go through the diagram and discuss the challenges of reconstructing life histories from excavated tools. In the practical we shall look at technological and typological attributes of stone tools across a wide temporal spectrum from the Oldowan to the Acheulian, examining the concept of Mode 1 and 2 industries. We shall also touch upon the often neglected subject of debitage, examining a variety of flake types and cores.

Essential reading for the Chaîne Opératoire


Further reading for the Chaîne Opératoire

Week 4  The Middle Palaeolithic.

3rd Feb  Practical: Discussion of the Chaîne Opératoire diagram and a Levallois and Middle Palaeolithic handling session

The lithic technologies of the Middle Palaeolithic of Europe and Middle Stone Age of Africa are characterised by distinctive set of forms produced by the Levallois technique, a planned method for obtaining predetermined flakes, blades and points. We shall study the technique and identify the different Levallois reduction strategies. The Levallois is also a technique whose presence or absence defines the Mousterian Industries of the Middle Palaeolithic; we shall take a look at the classic Charentian, Quina, Denticulate and Acheulian tradition industries of this time period. The question of the variability in these industries which has taxed archaeologists and students alike for over forty years will be examined. The lecture will close with a consideration of the Châtelperronian, and examine the claims from Arcy-sur-Cure, that this material was made by the Neanderthals. In the practical we shall get our first look at Upper Palaeolithic tools, with an emphasis on the production of blades and bladelets. (Please also see the papers posted on the Moodle site). The practical session today will involve examining Levallois and Mousterian material from the Institute’s collections. We shall examine the techniques required to prepare cores for the removal of Levallois flakes and examine Bordes’s classic division of the Mousterian industries in France.

Essential reading


Week 5  Lecture: Syn-depositional and post-depositional factors affecting lithic assemblages.

10th Feb  Practical: Handling session. Upper Palaeolithic stone tools and technology.

Both in the lectures and practicals to date, we have had a brief look at the types of taphonomic processes that can affect lithic assemblages. Today we shall take this further by studying these processes in more detail. We shall consider syn-depositional alteration of artefacts and assemblages in conjunction with post-depositional process that affect lithics. It is important to examine how these effects might be apparent in the archaeological record, as the net results of these processes are the assemblages that are collected, excavated and interpreted by archaeologists. In the practical session we shall start to come to terms with the increasing complexity and specialisation that is found in the Upper Palaeolithic lithic industries.
Essential reading


Further reading
You should also use your electronic journal access to look through some recent issues of the *Journal of Taphonomy*.

Week 6  15th -19th February READING WEEK

Week 7  Lecture: The Upper Palaeolithic and beyond.

24th Feb  Practical: Test 1 (Runs in four groups from 12.15-15.45).

In comparison with what has gone before, the Upper Palaeolithic lithic assemblages show increasing technological and typological complexity. We shall start by considering again the Châtelperronian, a controversial industry that many archaeologists believe was made by the Neanderthals. The controversy revolves not just around which species of hominin was responsible for the tools but whether this was a natural evolution in Neanderthal lithic technology or an imitation of the lithics and other artefacts made by their modern human, Aurignacian, neighbours, and this is the topic we shall discuss today. We shall then look at the other key European UP industries; the Aurignacian, Gravettian, Solutrian and Magdalenian, whilst also considering a couple of sites from further east in Eurasia. The Upper Palaeolithic/ Later Stone Age usually refer to blade technology and standardized retouched tools. The Mesolithic is characterised by microlithic technology, bifacial and ground stone technology. We will review the most typical tool types from each period in order to understand similarities and differences between them. (Please also see the papers posted on the Moodle site).
Essential reading

Bar-Yosef, O. and Bordes, J-G., 2010. Who were the makers of the Châtelperronian culture? *Journal of Human Evolution* 59, 586-593.


Further reading


**Week 8**

**Lecture: Indirect percussion and pressure flaking.**

**2nd Mar**

**Handling session.** Pressure flaked lithics and debitage. **Discussion of the first test.**

Most of the lithic material we have studied to date is the result of direct percussion, either by hard or soft hammer. Today we consider the concept of indirect percussion, from the simplest bipolar anvil technique, through to its most advance manifestation in the form of pressure flaking. Also under consideration will be the use of the punch technique, which is particularly relevant to the production of blades and bladelets (lamellar industries). In the practical that follows we shall handle a variety of types of cores, flakes/blades and tools produced by indirect percussion, across a wide temporal range. The readings for this section are largely contained
within those for fracture mechanics and the Upper Palaeolithic section from Week 7, some of
the articles are available for download from the Moodle site.

Week 9  Lecture: Discussion between MBR and Karl Lee on knapping.

9th Mar  Practical: Karl Lee’s knapping demonstration.

A practical session with flintknapper Karl Lee. The lecture will take the form of a discussion
between Mark and Karl, where we shall explore the nuances of learning how to knap and
discuss the connection between knapping and information transfer in the past. We shall also
consider and discuss, complexity, form, function and style, which we shall cover in depth in
the last lecture of the course.

Have a look at Karl’s work on his Primitive Technology website at:-
http://www.primitive-technology.co.uk

Week 10  Lecture: Later prehistoric tools from the Neolithic to the Iron Age and
ground-stone artefacts.

16th Mar  Practical: Lithic reports.

Lithic industries undergo a reversal in complexity during the Late Bronze Age as metal arrives
in significant quantity, this is most manifest in the Iron Age when lithics return to a pre-Acheulian
simplicity. We shall take a look at the increasing specialisation of the knapper, whereby lithic
production passes from many to the few and the professional knapper appears. Examination will
be made of other new developments such as the imitation of metalwork by lithic knappers, the
ceremonial discard of lithics and the production of stone tools as weapons for use against other
humans. Ground stone artefacts are any artefacts in which abrasion of stone played a key role in
manufacture. John Lubbock originally defined the Neolithic as the Age of polished (and ground)
stone. The main artefact classes are ground stone axes and querns. Beads and stone-ornaments
were also produced by grinding. While some types of stone can be shaped by knapping, followed
by grinding, others are worked by pecking, drilling and sawing. In the practical we shall address
lithic reports, both as stand-alone articles and as a component part of site reports. The practical
will lay the ground for the third assessed piece of work in the course, which is a critical appraisal
of a lithic report, which will include a consideration of the manner in which lithic artefacts are
illustrated in books and papers, and consider the changes that cheap colour publishing and digital
photography have had on the way lithic illustrations are published.

Essential reading
307-315.

Addington, L.R., 1986. Lithic Illustration. Chicago/London: University of Chicago Press. AL 30 Qto ADD.

Cambridge Manuals in Archaeology. AL ADK.


Butler, C., 2005. *Prehistoric Flintwork* (Ch.6 Early Neolithic flintwork; Ch.7 Neolithic Axe Production; Ch.8 Later Neolithic and early Bronze Age flintwork). Stroud: Tempus IOA BUT.


Further reading


Week 11 Lecture: Excavating and recording strategies for lithic assemblages and a brief introduction to the concept of style.

23rd Mar Practical: Test 2 (Runs in four groups from 12.15-15.45)
In Week 5, we examined syn-depositional and post-depositional processes that might potentially affect lithic scatters; these can be the result of human and subaerial activity and/or a combination of both (see earlier references). Today we consider the topic in more depth and link it to the selection of pertinent excavation and recording strategies. Hominin/human alteration of knapped lithic assemblages can take many forms; from the simple collection and dumping of accumulations of lithics, through removing elements of the assemblage for other tasks, to overprinting with other activities. Sub-aerial processes include weathering, erosion and re-deposition of parent soils/sediments and various forms of bioturbation. It is worth considering however that in strictly sedimentological terms hominin/human activity is just another form of bioturbation.

Having taken the above processes into consideration we now turn to the third main variable that affects our understanding and reconstruction of past deposited lithic technology: the way in which it is excavated and recorded. The methodology applied by archaeologists is affected by various factors, which include some of the following:-

The perceived mode and environment of deposition of the parent sediment body.
Density of lithics with the sediment body.
The association of lithics with other archaeological and palaeoenvironmental elements such as faunal remains and features.
Time and financial constraints.

Excavation and recording methods should be commensurate with the integrity of the lithics. For secondary or residual sites this is obviously going to be less detailed than for sites where there is in situ preservation. Excavation and recording methods impose control on the sediment bodies and archaeological material therein, this is most obvious in the imposition of three dimensional co-ordinates, which are usually derived from national grid reference and sea level data sources. Following on from the recording of 3D co-ordinates other variables might include long axis orientation, or the angle of dip of the object. In any reduction event it is important to know whether the full range of debitage is still present at or around the assemblage and therefore it is germane to consider sampling for the finer lithic elements or spalls. Cut-off size parameters between flakes and spalls are arbitrary and will be dependent upon the type of site and the resources available to the excavator, somewhere around 20mm is the norm. It is axiomatic that a lot of information about the assemblage(s) will only become apparent during post-excavation analyses, for example a significant number of large flakes might be missing; sedimentological analysis tells us that the only way they can have been removed from the scatter is through selection by humans. A reduction area at another part of the site which leaves a broken convergent side-end scraper then needs to be investigated to see if this area and its stone tools provide the solution to the whereabouts of the missing flakes. Although a lot can and will be learnt in the post excavation process it is absolutely vital and the sine qua non of this type of work that the archaeologist has extracted the absolute maximum of information from their time in the field because in most instances when the post-excavation analysis begins it is too late to go back.

There is no ideal set text for lithic excavation and recording. I suggest you look at some excavation and project reports and examine the methodology sections. I would recommend site reports on Abri Pataud, Pincevent, Wallertheim, Swanscombe, Boxgrove, High Lodge and Rob Hosfield’s work on residual assemblages (http://www.reading.ac.uk/secondarycontexts/arch-intro.htm and references therein).
To conclude today’s lecture we shall introduce the concept of style in the production of lithic artefacts, considering style in relation to artefact form and function. When can style be said to appear in the artefact record and how does it manifest itself? Does style become a progressively more important concept in lithic industries through time?

There will be no practical today as we shall be holding our second and final test.


APPENDIX A: POLICIES AND PROCEDURES 2015-16 (PLEASE READ CAREFULLY)

This appendix provides a short précis of policies and procedures relating to courses. It is not a substitute for the full documentation, with which all students should become familiar. For full information on Institute policies and procedures, see the following website: http://wiki.ucl.ac.uk/display/archadmin

For UCL policies and procedures, see the Academic Regulations and the UCL Academic Manual:
http://www.ucl.ac.uk/srs/academic-regulations ; http://www.ucl.ac.uk/academic-manual/

GENERAL MATTERS

ATTENDANCE: A minimum attendance of 70% is required. A register will be taken at each class. **If you are unable to attend a class, please notify the lecturer by email.**

DYSLEXIA: If you have dyslexia or any other disability, please discuss with your lecturers whether there is any way in which they can help you. Students with dyslexia should indicate it on each coursework cover sheet.

COURSEWORK

SUBMISSION PROCEDURES: You must submit a hardcopy of coursework to the Co-ordinator's pigeon-hole via the Red Essay Box at Reception (or, in the case of first year undergraduate work, to room 411a) by stated deadlines. Coursework must be stapled to a completed coversheet (available from IoA website; the rack outside Room 411A; or the Library). You should put your **Candidate Number** (a 5 digit alphanumeric code, found on
Portico. Please note that this number changes each year) and Course Code on all coursework. It is also essential that you put your Candidate Number at the start of the title line on Turnitin, followed by the short title of the coursework (example: YBPR6 Funerary practices).

LATE SUBMISSION: Late submission is penalised in accordance with UCL regulations, unless permission for late submission has been granted. The penalties are as follows: i) A penalty of 5 percentage marks should be applied to coursework submitted the calendar day after the deadline (calendar day 1); ii) A penalty of 15 percentage marks should be applied to coursework submitted on calendar day 2 after the deadline through to calendar day 7; iii) A mark of zero should be recorded for coursework submitted on calendar day 8 after the deadline through to the end of the second week of third term. Nevertheless, the assessment will be considered to be complete provided the coursework contains material than can be assessed; iv) Coursework submitted after the end of the second week of third term will not be marked and the assessment will be incomplete.

GRANTING OF EXTENSIONS: New UCL-wide regulations with regard to the granting of extensions for coursework have been introduced with effect from the 2015-16 session. Full details will be circulated to all students and will be made available on the IoA intranet. Note that Course Coordinators are no longer permitted to grant extensions. All requests for extensions must be submitted on a new UCL form, together with supporting documentation, via Judy Medrington’s office and will then be referred on for consideration. Please be aware that the grounds that are now acceptable are limited. Those with long-term difficulties should contact UCL Student Support and Wellbeing to make special arrangements.

TURNITIN: Date-stamping is via Turnitin, so in addition to submitting hard copy, you must also submit your work to Turnitin by midnight on the deadline day. If you have questions or problems with Turnitin, contact ioa-turnitin@ucl.ac.uk

RETURN OF COURSEWORK AND RESUBMISSION: You should receive your marked coursework within four calendar weeks of the submission deadline. If you do not receive your work within this period, or a written explanation, notify the Academic Administrator. When your marked essay is returned to you, return it to the Course Co-ordinator within two weeks. You must retain a copy of all coursework submitted.
**WORD LENGTH:** Essay word-lengths are normally expressed in terms of a recommended range. Not included in the word count are the bibliography, appendices, tables, graphs, captions to figures, tables, graphs. You must indicate word length (minus exclusions) on the cover sheet. Exceeding the maximum word-length expressed for the essay will be penalised in accordance with UCL penalties for over-length work. There is no penalty for going under the word limit.

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**CITING OF SOURCES and AVOIDING PLAGIARISM:** Coursework must be expressed in your own words, citing the exact source (author, date and page number; website address if applicable) of any ideas, information, diagrams, etc., that are taken from the work of others. This directive applies to all media (books, articles, websites, images, figures, etc.). Any direct quotations from the work of others must be indicated as such by being placed between quotation marks. Plagiarism is a very serious irregularity, which can carry heavy penalties. It is your responsibility to abide by requirements for presentation, referencing and avoidance of plagiarism. Make sure you understand definitions of plagiarism and the procedures and penalties as detailed in UCL regulations: [http://www.ucl.ac.uk/current-students/guidelines/plagiarism](http://www.ucl.ac.uk/current-students/guidelines/plagiarism)

**RESOURCES**
**MOODLE:** Please ensure you are signed up to the course on Moodle. For help with Moodle, please contact Charlotte Frearson, Room G4 (c.frearson@ucl.ac.uk).