

HPSC1012 Sources in History of Science

Course Syllabus

2012-13 session | Dr William MacLehose | w.maclehose@ucl.ac.uk

Course Information

This course allows students to explore the original sources on which the history of science is based. We will study the different kinds of materials available in history of science and, more importantly, the different ways to read sources, historical or otherwise. Using written sources, images, and material objects from the ancient world to the twentieth century, we will analyse their contexts and meanings. How can we know an object's significance? In what ways can a source be interpreted? We will visit local museums and libraries, including the Grant and Petrie Museums as well as the Wellcome Library, in search of new materials and perspectives.

Basic course information

Course website:	
Moodle Web site:	https://moodle.ucl.ac.uk/course/view.php?id=18597
Assessment:	3 essays (2x 1200 words and one 2400 words) + oral presentation
Timetable:	www.ucl.ac.uk/sts/hpsc
Prerequisites:	No prerequisites. Course is designed for first-year students.
Required texts:	No required texts; see moodle for readings
Course tutor:	Dr William MacLehose
Contact:	w.maclehose@ucl.ac.uk t: 020 7679 2929
Web:	www.ucl.ac.uk/silva/sts/staff/maclehose
Office location:	22 Gordon Square, Room 2.3
Office hours:	Wednesday 11.00-12.00 Thursday 11.-12.00 and by appointment

Schedule

UCL Week	Topic	Date	Activity
6	Introduction: Sources and contexts	1, 3, 5 Oct	Hippocratic writings
7	Why do we need to classify things?	8, 10, 12 Oct	Borges, Aristotle
8	Mapping the world	15, 17, 19 Oct	Booth's Poverty Map of London
9	Science and religion	22, 24, 26 Oct	Galileo
10	Defining a scientific method	29, 31 Oct, 2 Nov	Roger Bacon, van Leeuwenhoek
11	Reading Week	Week of 5 Nov	
12	Science and Politics	12, 14, 16 Nov	NHS debate
13	How to do oral history	19, 21, 23 Nov	Allison on Vietnam
14	Lies and fraud in science	26, 28, 30 Nov	Piltown man
15	Misguided science?	3, 5, 7 Dec	Huxley on eugenics
16	Oral presentations	10, 12, 14 Dec	

Assessments

Summary

	Description	Deadline	Word limit
Essay 1	Interpreting a primary source	23 Oct 2012	1200
Essay 2	Blogging about history of science	16 Nov 2012	1200
Oral presentation	Presentation to class about oral history	Week of 3 Dec 2012	10-15 minutes
Essay 3	Final project	19 Dec 2012	2400

Assignments

Essays must be submitted via Moodle.

In order to be deemed 'complete' on this module students must attempt to satisfy the requirements specified for each assessment. The first essay requires that you analyse a primary source in ancient science in relation to its context. The second essay asks you to identify and research an object or image and then analyse and contextualise it. The third and fourth

assessments are linked, and will ask you to apply methods from the field of oral history to study the history of science.

Criteria for assessment

The departmental marking guidelines for individual items of assessment can be found in the STS Student Handbook.

Aims & objectives

The goals of the course are to familiarise students with the different types of materials that can be used as primary sources for the history of science, and to provide different methods to be used in deciphering and interpreting those sources. By the end of the module, students will be able to demonstrate their abilities to locate, contextualise and analyse sources, whether written, oral, visual or material objects.

Reading list

Week 6 (1): What is a source? How can we discover its context(s)?

Reading: 'The Sacred Disease' in Hippocratic Writings, ed. G.E.R. Lloyd

Week 7 (2): Why do we need to classify things?

Reading: Jorge Luis Borges, 'The Analytical Language of John Wilkins' and Aristotle, *History of Animals*, book 1, parts 1-5.

Week 8 (3): Mapping the world around us

Readings: Maps and documents on John Snow, cholera map of 1954 at <http://www.ph.ucla.edu/epi/snow.html> and Map and documents at Charles Booth's Poverty Maps of London (1886-1903) at <http://booth.lse.ac.uk/>

Week 9 (4): Science and faith

Reading: Galileo Galilei, Letter to the Grand Duchess at <http://www.fordham.edu/Halsall/mod/galileo-tuscany.asp> and Albert Einstein, Science and Religion, at <http://www.einsteinandreligion.com/scienceandreligion.html> [read both parts]

Week 10 (5): Defining a scientific method

Reading: Roger Bacon, on experimental science at <http://www.fordham.edu/halsall/source/bacon2.asp> and Anton van Leeuwenhoek, Letter to the Royal Society on little animals seen in a microscope

Week 12 (6): Science and politics

Readings: NHS debates, April 1946 on the creation of the National Health Service

US government views on Science and Public Welfare by Vannevar Bush, 1945 (moodle)

Week 13 (7): Method of oral history

Reading: Fred Allison, 'Remembering a Vietnam War firefight: changing perspectives over time' and
J. Robert Oppenheimer, 'I am become death', various versions on YouTube

Week 14 (8): Lies and fraud in science

Reading: Charles Dawson, The Piltdown Skull and London Times 1953, Piltdown Man Forgery: http://www.tiac.net/~cri_a/piltdown/clarku.html
Christopher King, 'Fraud in Science', <http://ischoollmpiadozo.wordpress.com/fraud-in-science/>

Week 15 (9): Misguided Science?

Reading: Francis Galton on eugenics:
<http://web.archive.org/web/20071103082723/galton.org/essays/1900-1911/galton-1904-am-journ-soc-eugenics-scope-aims.htm>
Cesare Lombroso museum: http://www.thenautilus.it/Mu_Lombroso.html
Manual of Phrenology, 1835:
<http://ebooks.library.ualberta.ca/local/manualofphrenolo00philuoft>

Week 16 (10): Oral presentations, no readings

Course expectations

Students are expected to attend classes, prepare the readings and other assignments, participate in discussions, and complete the assessments.

Important policy information

Below are listed some important points of policy. Further details of all these policies can be found in the STS Student Handbook www.ucl.ac.uk/sts/handbook

Late submission of coursework

Penalties for late coursework submission are as follows:

- loss of 5 marks for work submitted less than 24 hours late
 - loss of 15 marks for work submitted between 1 and 7 days late
 - loss of all marks (i.e. work is graded 0) if submitted more than 7 days late
- These rules are statutory and non-negotiable.

Coursework word limits

Penalties for over-length coursework are as follows:

- Assessed work should not be more than 10% longer than the prescribed word count. Assessed work with a stated word count above this maximum cannot be accepted for submission, but will be immediately returned to the student with instructions to reduce the word length. The work may then be resubmitted, except insofar as penalties for late submission may apply.
- If submitted work is subsequently found to have an inaccurately stated word count, and to exceed the upper word limit by at least 10% and by less than 20%, the mark will be reduced by ten percentage marks, subject to a minimum mark of a minimum pass assuming that the work merited a pass.
- For work which exceeds the upper word limit by 20% or more, a mark of zero will be recorded.
- Footnotes and endnotes **do** count as part of the word limit
- Bibliography, tables, pictures and graphs **do not** count as part of the word limit.

Extensions

If unforeseeable circumstances prevent the completion of a piece of coursework, students may request an extension to the set deadline. Please consult the STS Student Handbook for further guidance on acceptable grounds for requesting an extension. Extensions must be negotiated in advance with the course tutor. Students to whom STS is parent department may also request an extension from their Personal Tutor. No extension is considered official without written approval.

The request for extension form can be found at: www.ucl.ac.uk/sts/study

Plagiarism

The *UCL Student Handbook* defines plagiarism as “the presentation of another person’s thoughts or words or artefacts or software as though they were [your] own”. Students are expected to know the College and Department policies in detail and to avoid even the appearance of inappropriate behaviour. In the first demonstrated instance of plagiarism or other irregularities in this course, students normally will receive a 0 F for the course and will be referred to the department and College officials for further action. All course work is subject to scrutiny against past papers and other materials for irregularities. Electronic and other checks will be conducted; see the *STS student handbook* for additional information.

Attendance

Regular attendance is mandatory.

Requirements to complete modules

Students are required to be ‘complete’ in all modules. Normally all assignments must be attempted in order for students to be considered complete. This is different from ‘passing’ a module which requires a minimum overall module mark of 40%.

Assessment and additional examiners

Assessed materials are marked by the course tutors. These provisional marks will be distributed to students at the first opportunity. To ensure fairness, materials subsequently are scrutinised by a second examiner within the Department, and a consensus is reached on these separate assessments. All assessed materials and the consensus marks are made available for

scrutiny by an examiner external to UCL. Marks are considered final only after the Board of Examiners for Science and Technology Studies has approved them in their annual meeting near the close of Term three.

Disputed marks

Students must endeavour to discuss any grievances over marks informally with the course tutor in the first instance. If informal discussion fails to resolve the matter satisfactorily and there appears to be genuine and substantive grounds for appeal, the student should submit a written explanation of their grievance to the chair of the board of examiners. A final formal written appeal can be made to the College Registrar.

Mechanisms for student feedback

Students have a variety of means for commenting on the module and module tutor. These include written module evaluations at the end of term, regular lecture assessments offered by the module tutor, and in-session opportunities. Students are welcome to bring comments and criticisms to the module tutor in the first instance, by anonymous note if necessary, then to their personal tutor or the STS undergraduate tutor. The department schedules regular meetings of the Undergraduate Student Staff Consultative Committee to which all students are invited.
