

HPSC1012 Sources in History of Science

Course Syllabus

2013-14 session | Dr Bill 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:	HPSC1012
Assessment:	Coursework 1 (1,200 words) (20%), Coursework 2 (1,200 words) (20%), Coursework 3 (2,400 words) (40%), Oral Presentation (10 minutes) (20%)
Timetable:	www.ucl.ac.uk/sts/hpsc
Prerequisites:	no pre-requisites
Required texts:	no required texts
Course tutor(s):	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:	Mondays, 11-12 Thursdays, 11-12, and by appointment

Schedule

UCL Week	Topic	Date	Activity
6	Introduction: Sources and contexts; key skills	4 Oct	Online key skills material
7	Why do we need to classify things?	11 Oct	Borges, Aristotle
8	Mapping the world	18 Oct	Booth's Poverty Map of London
9	Science and religion	25 Oct	Galileo
10	Defining a scientific method	1 Nov	Roger Bacon, van Leeuwenhoek
11	Reading Week	4 – 8 Nov	
12	Science and Politics	15 Nov	NHS debate
13	How to do oral history	22 Nov	Allison on Vietnam
14	Lies and fraud in science	29 Nov	Piltown man documents
15	Misguided science?	6 Dec	Huxley on eugenics
16	Oral presentations	13 Dec	

Assessments

Summary

	Description	Deadline	Word limit
Coursework 1	Review essay	11.59 pm 17 Oct	1,200
Coursework 2	Analytical essay	11.59pm 18 Nov	1,200
Coursework 3	Essay on visual sources	11.59 pm 13 Jan	2,400
Presentation	Presentation on visual sources	13 Dec	10 minutes

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

Details of college and departmental policies relating to modules and assessments can be found in the STS Student Handbook www.ucl.ac.uk/sts/handbook

All students taking modules in the STS department are expected to read these policies.
