

HPSC3030 Science and Global History

Course Syllabus

2011-12 session | Dr William Maclehorse | w.maclehorse@ucl.ac.uk

Course Information

This course studies the history of science as a vibrant and dynamic field in the medieval period. We will study Islamic and western Christian science from a comparative perspective and will focus on the transfer of knowledge from the ancient Greek world to the Arabic and then to the Latin West from the ninth to the fifteenth centuries. Taking a thematic approach, we will consider the following fields of scientific knowledge: geography, cosmology, medicine, astrology, technology, and their connections with religion and magic. How did medieval cultures, Muslim, Jewish and Christian, understand sex difference, pleasure, pain and basic human physiology? How did these cultures understand the natural world around them: plants, animals, planets and elements? In what ways did people in the past respond to epidemic disease? What associations existed between magic, religion and science? What can dissection of human corpses tell us about religious and scientific views of body and soul? How did travelers between cultures view themselves and the societies they visited? What impact did new technologies of the period have on architecture, warfare, shipbuilding and other aspects of life?

Basic course information

Course website:	http://www.ucl.ac.uk/sts/staff/maclehorse/3030
Moodle Web site:	http://moodle.ucl.ac.uk/course/view.php?id=12899
Assessment:	One essay, 40%, and a final examination, 60%
Timetable:	www.ucl.ac.uk/sts/hpsc
Prerequisites:	No prerequisites. Course is designed for third-year students.
Required texts:	None. Most readings are available on moodle.
Course tutor:	Dr William MacLehorse
Contact:	ucgawfm@ucl.ac.uk t: 020 7679 2929
Web:	www.ucl.ac.uk/silva/sts/staff/maclehorse
Office location:	22 Gordon Square, Room 2.3
Office hours:	Monday, 1-2 Tuesday, 1.30-2.30

Schedule

UCL Week	Topic	Date	Activity
20	Reorientating the History of Science	09-01-12	Discussion of Sa'id al-Andalus (handout)
21	The Transmission of Scientific Knowledge	16-01-12	Meyerhof and Burnett
22	The Body Discovered: Anatomy and Corpses	23-01-12	Park and Meyerhof
23	Sex, Desire and Physiology	30-01-12	Delaney and Green
24	Magic and Alchemy	06-02-12	Linden, Olsan
25	Reading Week	13-02-12	
26	Blurred Boundaries: Religion and Science	20-02-12	Lindberg, Perho
27	Astronomy and Alchemy	27-02-12	Saliba, Maimonides
28	Geography and Travel Accounts	05-02-12	Beeston, Edson
29	Medieval Technologies	12-03-12	Gimpel, Villard de Honnecourt
30	Epidemics and Infectious Diseases	19-03-12	Horrox, Dols

Assessments

Summary

	Description	Deadline	Word limit
Essay	Research essay	11.59 pm Friday 23-03-12	3000

Assignments

The assignment will allow the student to work with both primary and secondary sources to study a topic of his or her own choosing.

Essays must be submitted via Moodle.

In order to be deemed 'complete' on this module students must attempt to develop a research topic, a bibliography and write an analytical essay of 3000 words.

Criteria for assessment

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

Aims & objectives

The Aim of the course is to familiarise the student with the field of medieval Islamic and Western science. By the end of the course, the students will be able to analyse both primary and secondary sources critically and develop their skills as researchers into the history of science.

Reading list

Week 1: Reorientating History of Science

Sa'id Al-Andalusi. *Science in the Medieval World: "Book of the Categories of Nations."* Austin: University of Texas Press, 1991. (handout)

Week 2: The Transmission of Scientific Knowledge

Meyerhof, Max. 'Sultan Saladin's Physician on the Transmission of Greek Medicine to the Arabs.' *BHM* 18 (1945) 169-178.

Guy de Chauliac, Surgery, selection from Grant, Source Book.

Burnett, Charles. 'The Coherence of the Arabic-Latin Translation Programme in Toledo in the Twelfth Century.' *Science in Context* 14 (2001) 249-88.

Week 3: The Body Discovered: Anatomy and the use of corpses

Park, Katharine. 'The Life of the Corpse: Division and Dissection in Late Medieval Italy.' *Journal of the History of Medicine and Allied Sciences*. 50 (1995) 111-132.

Meyerhof, Max. 'Ibn An-Nafis (XIIIth Cent.) and His Theory of the Lesser Circulation.' *Isis* 23 (1935) 100-20.

Savage-Smith, Emilie. 'Attitudes toward Dissection in Medieval Islam.' *Journal of the History of Medicine and Allied Sciences* 50 (1995) 67-110. (recommended)

Week 4: Sex, Desire and Physiology:

Delaney, Paul. 'Constantinus Africanus' 'De Coitu': A Translation.' *The Chaucer Review* 4 (1969) 55-65.

Green, Monica H. *The Trotula: A Medieval Compendium of Women's Medicine*. Philadelphia, U Penn Press, 2001. (selections)

Jacquart, Danielle and Claude Thomasset. *Sexuality and Medicine in the Middle Ages*. Trans Matthew Adamson. Princeton University Press, 1988. (recommended)

Week 5: Magic and alchemy

Linden, Stanton J., ed. *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton*. CUP, 2003. (selections)

Olsan, Lea. 'Charms and Prayers in Medieval Medical Theory and Practice.' *Social History of Medicine* 16 (2003) 343-66.

Savage-Smith, Emilie. *Magic and divination in Early Islam. The Formation of the Classical Islamic World* 42. London: Ashgate, 2004. (Recommended)

Week 6: Blurred Boundaries: Religion and science

Lindberg, David. 'Medieval Science and Its Religious Context.' *Osiris* 10 (1995) 61-79.

Perho, I. *The Prophet's Medicine: A Creation of the Muslim Traditionalist Scholars*. Studia orientalia 74. Helsinki: Finnish Oriental Society, 1995.

Bartlett, Robert. *The Natural and the Supernatural in the Middle Ages. The Wiles Lectures*. CUP, 2008. (recommended)

Week 7: Astronomy and Astrology in society, science, and medicine

Saliba, G. 'The Role of the Astrologer in Medieval Islamic Society.' *Bulletin d'études orientales* 44 (1992) 45-67.

Maimonides, 'Letter on Astrology.' In *A Maimonides Reader*, Isadore Twersky, ed.

French, Roger. 'Astrology in Medical Practice.' In García-Ballester, Luis, Roger French, Jon Arrizabalaga and Andrew Cunningham, eds. *Practical Medicine from Salerno to the Black Death*. Cambridge: CUP, 1994, pp. 30-59. (recommended)

Week 8: Geography and travel accounts

Al-Idrisi's map of the world: [http://memory.loc.gov/cgi-](http://memory.loc.gov/cgi-bin/query/h?ammem/gmd:@field(NUMBER+@band(g3200+ct001903)))

[bin/query/h?ammem/gmd:@field\(NUMBER+@band\(g3200+ct001903\)\)](http://memory.loc.gov/cgi-bin/query/h?ammem/gmd:@field(NUMBER+@band(g3200+ct001903)))

Beeston, A.F.L. 'Idrisi's Account of the British Isles.' *Bulletin of the School of Oriental and African Studies* 13 (1950) 265-280.

Edson, Evelyn. 'World Maps and Easter Tables: Medieval Maps in Context.' *Imago Mundi* 48 (1996) 25-42.

Week 9: Artisans, Architecture and Artillery: Medieval Technologies

Gimpel, Jean. *The Medieval Machine: The Industrial Revolution of the Middle Ages*. Pimlico Press, 1992.

Villard de Honnecourt, *Sketchbooks*. http://commons.wikimedia.org/wiki/Villard_de_Honnecourt

Week 10: Epidemics and infectious diseases: medieval responses

Horrox, Rosemary, trans. *The Black Death*. Manchester, U of Manchester Press, 1994. (selections)

Dols, Michael. 'The Comparative Communal Responses to the Black Death in Muslim and Christian Societies.' *Viator* 5 (1974) 269-87.

Touati, François-Olivier. 'Contagion and Leprosy: Myths, Ideas and Evolutions in Medieval Minds and Societies.' In Lawrence Conrad and Dominik Wujastyk, eds, *Contagion: Perspectives from Pre-Modern Societies*. Aldershot: Ashgate, 2000. (recommended)

Course expectations

The course requirements consist of preparation for and attendance at class meetings, a research essay, and a final examination. Participation in discussion of the materials during the term is also required.

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.
