



Course Information

This course investigates how discoveries are made in medicine. As an example, recent research has suggested that infection with xenotropic murine leukemia virus-related virus (XMRV) might be associated with a range of diseases, including chronic fatigue syndrome and several different cancers. However, these claims remain hotly disputed for a number of reasons. This module will consider the philosophical issues at stake. Class time will be predominantly spent conducting original, collaborative research on this theme. This collaborative work hopefully will form the basis for a publication at the end of the course. As the precise direction of research will be student-led, it is not possible to give a precise description of philosophical topics that will be covered during the module. However, it seems likely that several core philosophical issues – discovery, causation, explanation, evidence and realism - are likely to be encountered. Focused, informal, teaching sessions during class time will be given in support of these issues.

Basic course information

Course Web site: <https://www.ucl.ac.uk/silva/sts/staff/clarke/clarke-teach/3028>

Moodle Web site: Search "HPSC3028"

Assessment: Two essays in Term 2 (50% each)

Timetable: Term 2. [Common timetable link](#)

Prerequisites: No prerequisites, students must be Year 2 or Year 3. This course is designed to be complementary to other courses run in this department, particularly HPSC2003 (Topics in the Philosophy of Science) and HPSC2020 (Revolutions in Medicine).

Required texts: No textbook or required readings.

Staff

Course tutor: Dr Brendan Clarke (course tutor)
Department of Science and Technology Studies, UCL

Contact: b.clarke@ucl.ac.uk | t: 020 7679 1328

Web: www.ucl.ac.uk/silva/sts/staff/clarke/

Office location: Room B14, 22 Gordon Square

Office hours: Tuesday 11-12

Thursday 11-12

Schedule

Week	Session theme	Date
1	Introduction	10-Jan-2012
2		17-Jan-2012
3		24-Jan-2012
4		31-Jan-2012
5		07-Feb-2012
	Essay 1 deadline	07-Feb-2012
	Reading Week	14-Feb-2012
6		21-Feb-2012
7		28-Feb-2011
8		6-Mar-2011
9		13-Mar-2011
10		20-Mar-2011
	Essay 2 deadline	21-Mar-2011

This course is research-based, and student-led. Session themes will therefore depend on your choice of research direction.

Essays

Summary

	Description	Deadline	Word limit
Essay 1	Section draft	11.59pm Tues 7-Feb-2012	4000
Essay 2	Section redraft	11.59pm Wed 21-Mar-2012	4000

Assignments

Assessment for this course is to produce sections of a scholarly article intended for publication. Essay one will be a draft version of your section of our paper, while essay two will be a finalised version. Both essays will require you to work in collaboration with other students on the course.

Due Dates and Role in Final Mark

Essay 1 is due no later than **7th February 2012**, before midnight.

Essay 2 is due no later than **21st March 2012**, before midnight.

Essays must be submitted through the Moodle service. In extremis, the essay may be submitted via e-mail to <b.clarke@ucl.ac.uk> as an attachment. Your essay must be compatible with MS Word 2003 or Adobe Acrobat 7.0.

Each essay contributes **fifty percent** to the final course mark. No rewriting is available.

Notes for Guidance

We will spend most of the class time discussing essay plans and progress. You are also most welcome to come and talk about your work with me outside scheduled class time, either during my office hours (11-12, Tuesdays and Thursdays) or at other times (by appointment).

As ever, you will be assessed on a combination of your writing and your research skills. Importantly (for the purpose of compiling a final paper for publication), citations should follow my guidance available on the course Moodle page.

Remember the policies about academic dishonesty and irregularities, especially plagiarism.

Penalties for late submission follow departmental policy as described in the *STS student handbook*. Course work must be submitted via Moodle service. No mark will be accepted for an essay unless it has been subjected to this scrutiny. No coursework will be accepted after the first Friday of Term 3, except *in extremis*.

It is the student's responsibility to obtain assignments, to meet deadlines, and to clarify any ambiguities that arise. If in doubt, ask. Students who cannot access my requirements and guidelines on-line should obtain a copy from me.

To apply for an extension to the set deadline for an assignment, students must submit a "request for extension of course work" form, available in the departmental office, via the STS Web site, and via the course Web site. This request should be submitted, with documentation, to the course tutor in first instance. If confidential issues are involved, submission of the extension request and documentation may be made through a student's personal tutor or the STS undergraduate tutor. Requests should be made in advance of the set deadline, when possible. Submission of a request is no guarantee of approval. Normally, I only agree to extensions in the case of documented serious medical conditions or other grave circumstance. For instance, having a cold on one day is not sufficient.

Marks will follow the departmental criteria for assessment. In sum, essays will be assessed on the following terms:

- the depth of scholarship and use of resources beyond those in lecture and required reading
- the ability to identify both major and subtle points of the subject
- the extent of your critical assessment, and the strength of your arguments
- the evidence you provide for having reflected on and extended course content and themes
- the general scholarly presentation of the work performed

My most common criticisms on student essays relate to:

- too much description/summary of readings and not enough analysis
- not developing your own argument
- no evidence of independent research
- terrible organisation and poor referencing techniques
- use of only one source or poor choice of sources (such as the *Encyclopaedia Britannica* or *Wikipedia*)

Research tools

Discuss your research with reference librarians at UCL, the Wellcome Library, and Senate House. I also encourage you to use research tools in MetaLib, including the History of Science, Technology and Medicine database. More information is available on the Moodle page, and we'll spend lots of time talking about research in the sessions.

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.

Extensions

If you think you will find it difficult to produce your essay on time, please come and discuss it with me. Extensions may be available. However, these **must** be negotiated with me in advance. As the student handbook says:

'Students may request an extension to the set deadline for a piece of course work if medical, family, and other personal circumstances intervene to prevent completion of assigned work. Extension requests must not be used as a crutch for poor time management or a failure to begin work sufficiently early to complete an assignment on time. The demands of outside employment are not sufficient grounds for an extension. Plan ahead. No extension is considered official without a written approval.'

The request for Extension form can be found at:

http://www.ucl.ac.uk/sts/study/bsc/documents/request_for_extension.pdf

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.

In light of these restrictions, I have been extremely generous with the word limits suggested for the coursework, and it will be possible to write an excellent essay without exceeding – or even matching – them. Please come and discuss with me if you feel that it will be difficult to adequately discharge your work while remaining within these limits.

Points of Policy

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

I follow the policy set by the *STS student handbook*. Given the collaborative nature of the course, I expect students to attend regularly, and to contribute actively.

Referral and re-sits

Students who fail this course have two options, depending on the final mark:

Students achieving a final course mark below F+ normally have the right to make a re-entry at the next available opportunity. This involves repeating all assessed components of the course.

Students achieving a final course mark in the range F+ may be allowed the option of referral, at the discretion of the board of examiners. A referral normally involves written work set over summer. Successful completion of a referral earns the student a minimum passing mark.

Requirements to complete HPSC3028

Student will complete the course normally only after having submitted a serious attempt at both essays.

Assessment and additional examiners

Assessed materials are marked by the course tutor. 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 are strongly advised in the first instance to discuss and resolve any grievances over marks informally with the course tutor. 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 course and course tutor. These include written course evaluations at the end of term, regular lecture assessments offered by the course tutor, and anonymous Web comment boxes. Students are welcome to bring comments and criticisms to the course tutor in the first instance, by anonymous note if necessary, then to their personal tutor or the undergraduate tutor. The department schedules regular meetings of the Undergraduate Student Staff Consultative Committee to which all students are invited.

Reading List

There is no set reading list. I've indicated a few articles that might prove useful in introducing the current dispute about XMRV below.

BBC Radio 4 Today programme, 29th July 2011.

[First segment - 7.10am - 75sec - 946kB .mp3]

[\[MP3 audio\]](#)

[Second segment - 8.10am - 12min45sec - 10MB .mp3]

[\[MP3 audio\]](#)

Callaway, E. 2011. Virology: Fighting for a cause. *Nature*, **471**: 282-5. [\[publisher\]](#)

Dong, B., Silverman, R.H. and Kandel, E.S. 2008. A Natural Human Retrovirus Efficiently Complements Vectors Based on Murine Leukemia Virus. *PLoS ONE*, **3**(9): e3144. [\[PMC\]](#)

Lombardi, V.C. et al. 2009. Detection of an Infectious Retrovirus, XMRV, in Blood Cells of Patients with Chronic Fatigue Syndrome. *Science*, **326**(5952): 585-9. [\[publisher\]](#)

Schlaberg, R. et al. 2009. XMRV is present in malignant prostatic epithelium and is associated with prostate cancer, especially high-grade tumors. *PNAS*, **106**(38): 16351-6. [\[PMC\]](#)

Shin, C.H. et al. 2011. Absence of XMRV and other MLV-related viruses in patients with Chronic Fatigue Syndrome. *Journal of Virology*. [\[ePub ahead of print from publisher\]](#)

Thagard, P. 1999. *How Scientists Explain Disease*. Princeton, NJ: Princeton University Press: 127-9.

Urisman, A. et al. 2006. Identification of a Novel Gammaretrovirus in Prostate Tumors of Patients Homozygous for R462Q RNASEL Variant. *PLoS Pathogens*, **2**(3): e25. [\[PMC\]](#)