
UNIVERSITY COLLEGE LONDON
INVESTIGATING CONTEMPORARY SCIENCE
COURSE OUTLINE

HPSC 3032 Autumn Term 2011	Course Convenor: Dr Jon Agar jonathan.agar@ucl.ac.uk Office hours: Wednesdays 11-1
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About this course

STS aims to provide students with the intellectual and other skills to analyse trends in science and technology. This course asks students to use – and develop further - these skills to investigate deeply, assess and present their findings on a chosen issue in the contemporary politics of science.

As a third year module, this course has been designed to make most use of acquired skills and knowledge in a way that moves students towards the world of work. In particular, the kinds of capacities demonstrable in a successful completion course are similar to those needed by an investigative reporter or a researcher for a think tank.

Through encouraging critical engagement with the political world, this course contributes to UCL STS's Global Citizenship programme.

Guided by the tutor, the student chooses a live, contentious issue on the contemporary politics of science. The issue is investigated through a combination of methods, including some from the following: desk research, face-to-face or phone interviews, questionnaires, or participant observation.

The intended learning outcomes are:

- In-depth knowledge of an issue in the politics of contemporary science, including facts and context
- Competence in bringing the scholarly tools of STS to analyse an issue in the politics of contemporary science
- Competence demonstrated of giving an account and explanation of an issue in the politics of contemporary science to both online audiences and presentation audiences
- Knowledge of the legal, ethical and other regulatory freedoms and constraints of research and reporting contemporary issues (such as media law and freedom of information legislation)
- Demonstrable possession and application of Global Citizenship skills, either in extension (for progressing GC students) or through this course alone

About the Department

This course is run by the Department of Science and Technology Studies, or STS. STS includes subjects such as history of science and technology, philosophy of science, sociology of science and the study of science communication and science policy. We encourage both good scholarship and active engagement. This is a course where you demonstrate both.

You can find out more about the STS department via the departmental website: www.ucl.ac.uk/sts.

You are advised to familiarise yourself with the departmental *Student Handbook* and consult them on all procedural matters.

Time/Space

For room locations check your online timetable.

This course does not follow the normal lecture/seminar format. While we will meet regularly to discuss the projects, much of the time spent doing the course will be spent in largely independent investigation.

Reading:

Some general reading is listed below. The specific readings will depend on the investigative topic you choose, and further guidance will be given by the course tutor.

Crucially, you will be expected to go significantly beyond what has been published on your investigative topic. To do so you will have to be familiar with the published record on the topic.

Attendance

Attendance at the regular classes is essential.

Assessment

This term's course will be assessed on the basis of two pieces of written work and one short oral presentation.

The first piece of written work is a 4000 word background report (50%). It tells me what is known about the issue from published sources. What are the known facts of the case? This piece needs to be written in the same format as a regular essay: you need to give full references and a bibliography.

The second piece of written work is a 2000 word news article reporting the findings of the investigation (35%). This reports the scoop – what you have found out from your investigation that goes significantly beyond what was known from published sources alone.

The news article should be pitched as if it was towards the 'general editor' of a national broadsheet newspaper. The editor would be most impressed by a headline on the front page, of course, but other stories would be accommodated. One difference, however, is that you will be able to write more words than a typical national newspaper story on science. A good model, in terms of length and approach, is the 'Feature News' stories reported in *Nature*.

You will also give a short (10 minute) presentation on your investigation (15%), followed by 10 minutes of questions.

The due dates for the assessments are:

	Length	% of Final Mark	Submitted by
Background Report	4000 words	50%	14 th November 2011
News article	2000 words	35%	9 th December 2011
Presentation	-	15%	TBC (weeks 10/11)

Written work should be handed in via moodle (moodle.ucl.ac.uk). Do not e-mail coursework direct to the course tutor without prior permission.

The STS rules on assessment, which follow updated UCL policies, in particular with regards policies/procedures for students requesting extensions, policies on penalties for late submission and over-length coursework, are given in the *STS Student Handbook*. It is available on-line at: http://www.ucl.ac.uk/sts/study/bsc/documents/sts_student_handbook.pdf

General Background Reading

John Pilger (ed.), *Tell Me No Lies: Investigative Journalism and its Triumphs*, London: Vintage, 2005

This is a collection of post-1945 reports by investigative journalists, starting with Wilfred Burchett's report from Hiroshima and going up to the so-called war on terror. Good inspirational reading.

David Randall, *The Universal Journalist*, 3rd edition, London: Pluto Press, 2007

There are lots of how-to guides to being a journalist, but this one is the best. Lots of good practical advice mixed with examples drawn from the history of journalism. Written by a working journalist.

Steve Miller and Jane Gregory, *Science in Public: Culture, Communication, Credibility*, London: Plenum, 1998.

You probably know this one already! Written by two STS staff members, this is the book that tells you about the public face of science, including how news values shape science reporting

Starting Investigations

Where do stories come from? Randall lists the following, in descending order, for a typical national newspaper covering domestic news:

- In Government departments agencies
- Off-diary (contacts, observation)
- Courts, inquiries
- Universities
- Pressure groups, unions, etc
- Political sources
- Specialist press
- Commercial companies
- Consumer magazines
- International organisations
- Police

You are investigating the politics of contemporary science, which means that your sources might be different. You will start by identifying a broad topic to investigate.

Here are some idea of where to start:

- 'News' pages of general science journals and magazines: *New Scientist*, *Nature*, *Science*, as well as the science pages of national newspapers, and the science news webpages of news organisations such as the BBC
- Newsfeeds of websites of research-active organisations, for example universities (including UCL), research institutes, government laboratories, science-based industrial companies. But remember this is just the start of an investigation – don't fall in to the trap of 'press release' journalism!
- Science news feeds of Facebook and Twitter
- The research campaigns and reports of NGOs, especially those that comment on, or use, scientific research. Examples include environmental organisations (such as Greenpeace, GeneWatch UK, etc), local organisations set up to oppose large scale projects, and so on
- A special case of the NGOs are the science advocacy groups: organisations that campaign on science or represent activist scientists. Examples include:

Campaign for Science and Engineering (CASE)
<http://sciencecampaign.org.uk/>

British Science Association
<http://www.britishtscienceassociation.org/web/>

Union of Concerned Scientists
<http://www.ucsus.org/>

- Government departmental reports on science and research. For example:

Government Office of Science (GO Science, in BIS)
<http://www.bis.gov.uk/go-science>

Ministry of Defence (the science parts)
<http://www.science.mod.uk/>

Department of Health
<http://www.dh.gov.uk/en/index.htm>

Research Councils
<http://www.rcuk.ac.uk/Pages/Home.aspx>

- The government collects and publishes statistics on science. These are known as SET Statistics. They are crucial not only for 'following the money' but also can help prompt ideas for topics:

<http://www.bis.gov.uk/policies/science/science-funding/set-stats>

- Commercial research and development is one of the best topics for pioneering investigative work. A useful place to start is a publication called R&D Scoreboard which sets out some statistics on commercial R&D:

<http://www.bis.gov.uk/policies/innovation/business-support/research-and-development/randd-scoreboard>

Beyond that, each company has a website, which you should regard as marketing and a source for some initial ideas rather than an objective or complete source of knowledge of privately-funded science.

- The Parliamentary committees investigate many aspects of public life, especially where public money is spent. There are two specialist science and technology select committees, one for the Commons and one for the Lords. Both investigate contemporary issues in science and technology, calling and interviewing witnesses and publishing reports. A great place to start.

Science and Technology Committee (Commons)
<http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/>

Science and Technology Committee (Lords)
<http://www.parliament.uk/hlscience>

- Finding and accessing public records. You can investigate a contemporary issue by examining public records. Public records older than 30 years will (except in some circumstances) be available at the National Archives, which are in Kew, west London.

Browse the catalogue via:

<http://www.nationalarchives.gov.uk/catalogue/default.asp?j=1>

Records more recent than 30 years can be made available by using a Freedom of Information (Fol) request. More info here:

http://www.direct.gov.uk/en/governmentcitizensandrights/yourrightsandresponsibilities/dg_4003239

You should have an initial response to a FoI request in 20 days, so they are a possible tool to use.

Tools and methods: we will discuss in class. They include: document research, telephone interviews, talking to contacts, archive visits, FoI requests, and more.