

# HPSC3032 Investigating Contemporary Science

## Course Syllabus

2012-13 session | Dr Jon Agar | [jonathan.agar@ucl.ac.uk](mailto:jonathan.agar@ucl.ac.uk)

### Course Information

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.

### Basic course information

Course website:	See Moodle
Moodle Web site:	See Moodle
Assessment:	Two essays 60% and 40%
Timetable:	<a href="http://www.ucl.ac.uk/sts/hpsc">www.ucl.ac.uk/sts/hpsc</a>
Prerequisites:	No prerequisites
Required texts:	No required texts
Course tutor:	Jon Agar
Contact:	<a href="mailto:Jonathan.agar@ucl.ac.uk">Jonathan.agar@ucl.ac.uk</a>   t: 020 7679 3521
Web:	<a href="http://www.ucl.ac.uk/silva/sts/staff/agar">www.ucl.ac.uk/silva/sts/staff/agar</a>
Office location:	22 Gordon Square, Room 3.3
Office hours:	Tuesday 1-2pm Thursday 3-4pm

### ***Aims and Objectives: 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)

### ***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](http://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.

## **Schedule**

<b>UCL Week</b>	<b>Topic</b>	<b>Date</b>	<b>Activity</b>
20	Introduction	2 Oct	
21	What makes good investigative reporting	9 Oct	Read investigative journalism
22	Story choice discussion	16 Oct	Identify probable topic
23	Newsroom	23 Oct	Report progress
24	Newsroom	30 Oct	Report progress
<b>25</b>	<b>Reading Week</b>		
26	Newsroom: identifying the scoop	13 Nov	Identify scoop
27	Newsroom	20 Nov	Report progress
28	Newsroom	27 Nov	Report progress
29	Newsroom	4 Dec	Report progress
30	Composing the Final Edition	11 Dec	Stories published

## Assessments

### Summary

	<b>Description</b>	<b>Deadline</b>	<b>Word limit</b>
<b>Essay 1</b>	Background report	12 Nov 2012	4000
<b>Essay 2</b>	News article	7 Dec 2012	2400

### Criteria for assessment

The departmental marking guidelines for individual items of assessment can be found in the STS Student Handbook. [Insert additional module-specific criteria where available]

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 (60%). 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 2400 word news article reporting the findings of the investigation (40%). 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.*

Written work should be handed in via moodle ([moodle.ucl.ac.uk](http://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](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*, 3<sup>rd</sup> 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.ucsusa.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](http://www.direct.gov.uk/en/governmentcitizensandrights/yourrightsandresponsibilities/dg_4003239)

You should have an initial response to a Fol 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, Fol requests, and more.

## Important policy information

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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](http://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](http://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.

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