HPSC0057 Investigating Contemporary Science

Course Syllabus

2019-20 session | Dr Melanie Smallman | m.smallman@ucl.ac.uk

Course description

STS aims to provide students with the intellectual and other skills to analyse trends in technology and society. This course asks students to use – and develop further – these skills to investigate, analyse, assess and communicate their findings on a particular issue in the contemporary politics of science. As a third-year module, this course has been designed to bring together skills and knowledge in STS acquired to date, in a way that moves students towards the world of work. As such, the course will be focused around a project, based on real-world tasks that might be encountered working as a policy adviser or science communicator. In addition to demonstrating the value of the STS analytical and communication skills gained to date, the output of this project should go on to form a valuable part of students' portfolio and give something concrete and workplace-relevant to discuss in future job interviews.

Basic course information

Moodle Web site:	HPSC0057
Assessment:	Two essays 60% and 40%
Timetable:	www.ucl.ac.uk/sts/hpsc
Prerequisites:	No pre-requisites
Required texts:	No required texts. Each week there are two or three essential readings
Course tutor(s):	Melanie Smallman
Contact:	m.smallman@ucl.ac.uk
Web:	www.ucl.ac.uk/sts/staff/smallman
Office location:	22 Gordon Square, Room 1.3
Office hours:	Monday 16.00-17.00 Wednesday 11.00-12.00

Schedule

UCL Week	Topic	Date	Activity
20	Introduction Agreeing Ground Rules for working together Brainstorming topics	16 Jan	Do the essential reading before each class
21	Choosing a topic via the STS lens	23 Jan	Identify topics to discuss
22	Stages of an investigation Sources and techniques for generating info	30 Jan	Do essential reading
23	Writing evidence Presentations on what we know already	6 February	Be ready to present your findings on what you have discovered so far
24	Tutorials on draft evidence	13 February	Bring draft evidence (assignment 1)
25	**Reading Week**	20 February	No class
26	Presenting the evidence and identifying key issues for the report	27 February	Be prepared to give short (2min) summary of your evidence to the class.
27	What makes a good policy analysis and report? [guest lecturer tbc]	5 March	
28	Tutorial session on draft report chapters	12 March	Bring draft report chapters/outlines for feedback and discussion
29	Bringing the report together – drafting the introduction and conclusion	19 March	Second Assignment submitted
30	Producing the final version, planning dissemination and lessons learned.	26 March	

Assessments

	Description	Deadline	Word limit
Essay 1	Evidence report	24/02/20	2400
Essay 2	Report Chapter	20/03/20	3000

In this course, we will be working together on a class investigation of a particular aspect of contemporary science (which we will agree in class), working towards producing a select committee/think-tank style report of our findings. Each assessment will be an individual piece of work that will contribute to the overall report. The course will be assessed on the basis of two pieces of written work and peer assessment of your involvement in the group activities.

The first piece of written work is a 2400 word submission of evidence. This will present the findings of your investigation into a particular part of the issue we are investigating and be based upon reading or an interview. It should be

- Relevant to the inquiry topic we select
- Be accessible with clear language and no jargon
- Provide context
- Give clear recommendations
- Remain politically neutral
- Give references and further reading

The second piece of written work is a 3000 word report chapter. This will be based on your further investigations (reading, evidence from the class and further interviews) and will be written for a general/non-technical audience. We will discuss topics in class, with a view to each chapter adding a new perspective to the issues.

Finally, we will write the introduction and recommendations of the whole report in class, as well as plan dissemination activities. This activity will aim to bring together, summarise and promote the key findings from everyone's work. Each student's participation in this activity will be peer-evaluated, based upon criteria that we will agree in class at the beginning of the module and only those who fully participate in this activity will be included in the authorship of the final report.

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

Criteria for assessment

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

Above these criteria, both the assessments will also be marked for the accessibility and clarity of their writing.

Evidence Submissions should be:

- Relevant to the inquiry topic we select
- Be accessible, written in good English with no spelling or grammatical erros and using clear language and no jargon

- Provide context
- Give clear recommendations
- Remain politically neutral

Report Chapter
In addition to the criteria indicated in the STS Student Handbook, the following are the main criteria on which your essay will be marked. There are no set numbers/ percentages associated with these criteria but we will give you qualitative feedback based on them.

1. Answer the question
Read the question carefully and answer it specifically – do not give irrelevant material or drift into answering other questions.

2. Organisation
Is the essay organized into an introduction, main body and conclusion? Does each part flow naturally into the next one? Is the evidence in a logical order? Using signposting sentences (in this section I will argue that…) will help.

3. Introduction
You should give an introduction to your essay in no more than one or two paragraphs. Introduce your topic and your line of argument, no more. Good introductions are concise and precise.

4. Clarity
We place great emphasis on clarity of argument and expression. Avoid ambiguity and vagueness. Do not assume your reader already knows what you are talking about. Try to keep your line of argument clear. It often helps clarity to divide the main body of the essay into sections (typically three or four for a 2500 word essay). Accurate spelling, grammar, punctuation and simple, active sentence structure also improve clarity.

5. Argumentation
Is the main argument of the essay clear, coherent and persuasive? Is it properly supported by the evidence available?

6. Conclusion
Your essay should have a conclusion that is clearly marked as such (new paragraph, 'In conclusion…'). It should be substantial in summing up what you have argued and exploring the implications of what you have argued.

7. Reading/ use of sources
How well have the readings and other resources been used? Does the essay reflect them accurately? Is the essay overly dependent on one source?

8. Independent critique?

Does the essay offer some independent critique or thought on the question or does it merely report what is in the literature? In Masters-level courses this is an essential component of essays.

9. Referencing
You must reference all quotes and all references/ summaries of books, etc. Pick one system for referencing and stick to it. Refer to individual page numbers, not just whole texts, whenever possible. Making use of ideas from or paraphrasing material without clearly referencing the original source is plagiarism and has incurs serious penalties.

10. Bibliography
You need to supply a bibliography of all works referenced at the end of your essay. You must supply author, title, date, place of publication and publisher.

Aims & objectives

The aim of this course is to draw on the analytical skills and concepts offered by STS, to get students to think and write critically about the relationship between science and society. In particular, as a third year course, this course is geared towards applying these skills and frameworks towards real-world applications, and so students will be asked to use their skills to investigate, analyse and assess a live science issue and to communicate their findings to a potential future employer. As such, as well as delving deeper into the academic ideas used in STS, the course will be focused around a series of group projects. These projects will be based tasks that have been identified and 'commissioned' by science communicators, think-tanks and policymakers from a range of organisations, as being valuable and typical of the kind of research task students might find themselves faced with in the world of work. In addition to demonstrating the value of the STS analytical and communication skills gained to date, the output of this project should go on to form a valuable part of students' portfolio.

Format of classes

Classes will take a range of formats. Typically they will include an introductory 'lecture' by the course tutor (or guest lecturer where appropriate), followed by a class discussion and one-to-one help, aiming to develop the ideas and project tasks most effectively. Sandpit sessions will be an opportunity to share and receive feedback and support on your work in progress. Students will be asked to sign up to lead each of the discussions, so please be prepared to speak and share your work in progress. There is also the possibility that we be joined by some guest lecturers who will give students the opportunity to find out more about the role of investigation in the world of work.

Reading list

These are a limited number of **essential** readings for this course. Please make sure that you have read and are able to talk about them before the relevant class, as you will be called upon to discuss them in the class.

Further readings will be provided specific to the investigative topic you will be working on and further guidance given by the course tutor. It is also expected that you will identify and explore additional material to inform your project and class discussions.

Essential Reading

If you have not studied STS before, or want to remind yourself of key concepts, then a good text that will bring you up to speed with other students in the class is:

Sismondo, S. (2010). An introduction to science and technology studies. Wiley-Blackwell.

General reading

If you are interested in policy analysis, the introduction and Chapter 1 will be helpful:
Bardach E (2011) A Practical Guide for Policy Analysis. New York: Chatham House Publishers.
https://www.ethz.ch/content/dam/ethz/special-interest/gess/cis/international-relations-dam/Teaching/cornerstone/Bardach.pdf

For a more journalistic approach, this has lots of good practical advice mixed with examples drawn from the history of journalism. Written by a working journalist:
David Randall, The Universal Journalist, 3rd edition, London: Pluto Press, 2007.

Examples of Parliamentary Select Committee Reports and evidence submissions

(You will find links to evidence submissions at the back of the reports themselves)

Science Communication:
https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/162/162.pdf

Genomics and Gene Editing:
https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/854/854.pdf

Digital Skills Crisis
https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/270/270.pdf

Examples of Think-Tank Reports

Various from IPPR:
https://ippr.org/research/publications

Rise of Digital Politics (Demos):
https://www.demos.co.uk/wp-content/uploads/2016/10/Demos-Rise-of-Digital-Politics.pdf

Role of EU funding in UK Research and innovation (Royal Society):
https://royalsociety.org/topics-policy/publications/2017/role-of-EU-funding-in-UK-research-and-innovation/

The Age of Automation (The Royal Society of Arts):
https://www.thersa.org/discover/publications-and-articles/reports/the-age-of-automation

Course expectations

In addition to submitting assessed material, students are expected to attend and participate in all classes, and to work within the 'contract' for group work that you will develop in the first class. You are expected to have read the essential (and ideally recommended) reading before each class and be willing to discuss the literature and the lecture. Students are expected to conduct online research into areas of new technology. Students are also expected to share their work in progress, such that they can be read and commented upon by other members of the class. Those assessments reaching the required standard will have the opportunity to be included in the collective report, which will be shared more widely, outside UCL. Participating in this wider publication might require some effort outside class and beyond the scope of the assessed work only.

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.