

# HPSC0126 Social Research Methods and Data Analysis in STS

## Course Syllabus

2019-20 session | Convenor: Dr Melanie Smallman | e-mail [m.smallman@ucl.ac.uk](mailto:m.smallman@ucl.ac.uk)

This course introduces students to the theory and practice of research methods in STS and social science more generally, comprising both qualitative and quantitative methods. It will cover research design; qualitative and quantitative methods; research management and ethics; and the epistemology of social research. The course is strongly recommended for any students wanting to undertake empirical social science research for their dissertation, and for students who want to familiarise themselves with how social scientists (particularly within STS) undertake research. In addition, for those wishing to apply for ESRC +3 PhD funding, it is designed to cover the core training requirements specified within Annex I of the [ESRC Postgraduate Training and Development Guidelines \(2009\)](#).

### Course Information

#### Basic course information

Course website:	See Moodle
Moodle Web site:	HPSC0126
Assessment:	See Moodle
Timetable:	See UCL on-line timetable
Prerequisites:	None
Required texts:	See Moodle
Course tutor(s):	Dr Melanie Smallman (convenor); team taught course
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Web:	<a href="https://www.ucl.ac.uk/sts/people/dr-melanie-smallman">https://www.ucl.ac.uk/sts/people/dr-melanie-smallman</a>
Office location:	22 Gordon Square, Room 1.3
Office hours:	Tuesday 2-3pm Wednesday 10-11am

## Schedule

UCL	Topic	Date	Lecturer(s)
6	Introduction: What is Social Research	2/10	Dr Melanie Smallman Dr Simon Lock
7	Interviews and Focus Groups	9/10	Dr Melanie Smallman
8	Documents	16/10	Prof Brian Balmer
9	Surveys and Sampling	23/10	Prof Sarah Edwards
10	Preparing for first assignment	30/11	Dr Melanie Smallman
11	<b>Reading Week</b>	06/11	
12	Case Studies	13/11	Dr Tiago Mata
13	Ethnography and Observation	20/11	Dr Jack Stilgoe
14	Social Experiments	27/11	Prof Sarah Edwards
15	Visual Methods	4/12	Dr Jean-Baptiste Gouyon and Dr Tiago Mata
16	Research Design	11/12	Dr Simon Lock

## Assessments

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### Summary

	Description	Deadline	Word limit
<b>Research Paper review</b>	See Moodle	5pm, 14 <sup>th</sup> November 2018	1,000 words (20%)
<b>Research Methods Essay</b>	See Moodle	5pm, 12th December 2018	4000 words (80%)

## Assignments

### Assessment 1 (20%)

Drawing on the methodological lessons learned to date, take one of the papers below and write a review of the methods used. Things you might want to describe:

- What was the research setting out to do?
- What methods were used?
- Were they appropriate? Explain why you think that.
- What other methods could have been used? Explain why they might be better/worse.

Callon, M. Some Elements of a sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay". In J. Law ed., *Power, Action and Belief: A New Sociology of Knowledge?*

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-954X.1984.tb00113.x>

Cassidy, A. Big Science in the field: experimenting with badgers and bovine TB, 1995-2015. *HPLS* (2015) 37: 305

<https://link.springer.com/article/10.1007/s40656-015-0072-z#citeas>

Chimba, M., & Kitzinger, J. (2010). Bimbo or boffin? Women in science: An analysis of media representations and how female scientists negotiate cultural contradictions. *Public Understanding of Science*, 19(5), 609-624.

<http://journals.sagepub.com/doi/abs/10.1177/0963662508098580>

Collins HM (1974) The TEA Set: Tacit Knowledge and Scientific Networks. *Science Studies* (v) 165-86.

<http://journals.sagepub.com/doi/pdf/10.1177/030631277400400203>

Starr, SL., Griesmer JR. (1989) Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science* Volume: 19 issue: 3, page(s): 387-420

<http://journals.sagepub.com.libproxy.ucl.ac.uk/doi/abs/10.1177/030631289019003001>

Sturgis, P., Allum N. *Science in Society* (2004): Re-Evaluating the Deficit Model of Public Attitudes *Public Understanding of Science* vol: 13 (1) pp: 55-74

<http://journals.sagepub.com/doi/10.1177/0963662504042690>

Assessment criteria (please also refer to those given in the Departmental Handbook)

1. Has the student identified the research question
2. Has the student identified the research methodology?
3. Has the student understood the pros and cons of different social research methods?
4. Has the student presented their assessment in a coherent and well argued way?

### Assessment 2 (80%): Essay

Write an essay no longer than 4000 words that outlines how you would undertake research on one of the projects listed below and evaluates methodological alternatives for the research. For each project we have provided a link to more information about the research topics.

The projects (choose one):

Evaluate the impact of the Newton International Fellowships on global networks of science. <https://royalsociety.org/~media/grants/schemes/NIF-Scheme-Notes-2017.pdf>

Explore cultures of science advice at DEFRA. <https://www.gov.uk/government/publications/science-advisory-council-review-of-defras-expert-evidence-advisory-committee-structure>

Describe the role of “tacit knowledge” in nanotechnology research. <https://www.newscientist.com/article/mg20627624-900-tacit-knowledge-you-dont-know-how-much-you-know/> [Full article available through UCL library, electronic journals]

Please read the following instructions:

In the essay you should aim to use 3 methods and a mix of quantitative and qualitative approaches, however this can vary and the over-riding criteria for assessment here will be that you have fully justified your choice, recognising the strengths and limitations of your approach within the context of the research proposed’.

The methods can be chosen from the range covered in the course or you may want to bring in other social science methods. All work should contain references to methods text books and other literature.

Your essay should be formatted to contain the following steps.

A. Problem statement and background, e.g. for project 3, discussion of what is tacit knowledge, references to laboratory studies, Collins, etc..., discussion of what is nanotechnology with some coverage of the STS literature on it.

B. Formulate a set of possible ways to interrogate the problem, which should state specific research questions and, only if appropriate, a hypothesis.

C. Either pick one of the questions posed, or follow through several questions, for each question outlining comparative methodologies. Discuss what kind of evidence each approach would offer, e.g. which methodologies would (or would not) capture ‘tacitness’? Ask what must be considered to operationalise these methodologies in the field. Be explicit about feasibility and ethics. (Although we don’t expect you to budget your analysis, as a ‘rule of thumb’ assume that your research project cannot extend beyond 4 years, and 600k pounds of budget).

Discuss the drawbacks and advantages of each approach; you must articulate what criteria would be most relevant for such comparisons. Be careful not to simply list all the advantages/disadvantages of your chosen methods straight out of a methods textbook. This might be a starting point – but you need to link them to your proposed research (eg don’t say one advantage of method X is that its inexpensive and leave it at that if your research is actually going to be costly).

D. Conclude, what is your best advice on how to approach the research problem, with feasibility, ethical and evidential robustness, this implies also clarity on what is the most interesting facet of the topic/problem.

#### Assessment criteria

- 1- The student follows the instructions
- 2- The student is able to formulate research questions.
- 3- The research proposed in the essay demonstrates a good understanding of the relationship between research question and methodological approach.
- 4- Each choice of research method is convincingly argued.
- 5- The document demonstrates engagement with the relevant literature and class materials.
- 6- The essay is written in a clear and accessible way.

#### Submitting Assessments:

You **MUST** submit your assessments using the submission points below.

- [Check your work is referenced properly using Turnitin.](#)
- Do not put your name anywhere on the work that you upload - **only use your UCL student number/candidate number.**
- Do not put your name in the filename of any work you upload (we see the filename!).
- Put the essay number or a brief essay title in the filename of what you upload.
- [Get help using Turnitin:](#)
  - [check your work for plagiarism](#)
  - [submit your assessment](#)
  - [read your feedback.](#)

Refer to the Module syllabus for the assessment schedule.

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In order to be deemed 'complete' on this module students must attempt both the assignments.

#### Criteria for assessment

The departmental marking guidelines for individual items of assessment can be found in the STS Student Handbook. Further specific guidance is given on Moodle.

#### Aims & objectives

This course introduces students to the theory and practice of research methods in STS and social science more generally, comprising both qualitative and quantitative methods. It will cover research design; qualitative and quantitative methods; research management and ethics; and the epistemology of social research. The course is strongly recommended for any students wanting to undertake empirical social science research for their dissertation, and for students who want to familiarise themselves with how social scientists (particularly within STS) undertake research. In addition, for those wishing to apply for ESRC +3 PhD funding, it is designed to cover the core training requirements specified within Annex I of the [ESRC Postgraduate Training and Development Guidelines \(2009\)](#).

By the end of this course you will:

- Be introduced to a range of qualitative and quantitative social research methods used in STS and understand their strengths and weaknesses.
- Be introduced to underlying epistemological, ontological, ethical and axiological

issues underpinning social research

- Know how to formulate research questions.
- Understand the relationship between research questions and methodological approach.
- Have engaged with the relevant academic literature on research methods.

## Reading list

There are numerous text books on social research methods available to consult, we are recommending the following as key texts for this course:

- Judith Bell (2010). *Doing your research project: a guide for first-time researchers in education, health and social science*. Maidenhead: McGraw-Hill Open University Press.
- Martin Denscombe (2007). *The good research guide: for small-scale social research projects*. Maidenhead: Open University Press.
- Alan Bryman (1988). *Quantity and quality in social research*. New York: Routledge.
- Alan Bryman (2012 or 2016). *Social Research Methods* (4th or 5th edition). Oxford: OUP.

**See individual sessions on Moodle for further reading.**

## Course expectations

Students are required to attend at least 70% of classes and to participate in discussions.

## Important policy information

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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](http://www.ucl.ac.uk/sts/handbook)

All students taking modules in the STS department are expected to read these policies.

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