University of Essex

Department of Government

Scientific Reasoning for the Social Sciences

GV110

2015-2016

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Lecturer and Module Supervisor:
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Instant Deadline Checker:

In-Lecture Test: Week 7 (9-10 am)	30% of coursework mark
Final Assignment: Week 12 (14/12 at 09.45 am)	50% of coursework mark
Presentation: TBA (assigned after Week 1)	20% of coursework mark

Module Description:

This module provides an introduction into the basics of the philosophy and theory of empirical social science, its structure, procedures and techniques. It tackles questions such as 'what is a research question?,' and 'how is scientific progress made?.' This module thus seeks to introduce students to the basics of scientific work and procedures in the social sciences, which in turn shall allow them to conduct work that fulfils satisfactory standards of research quality. This not only pertains in particular to students' classes during the third academic year, but also in light of potential postgraduate studies.

Module Aims:

- Provide students with an understanding of the basic issues in research design and philosophy of science.
- Provide students with an introduction to construct a scientific explanation (research question, theory-building, hypotheses).
- Provide students with an understanding of how to evaluate theories.

Module Structure and Teaching:

Teaching on the module will be in form of a **lecture** and classes.
The weekly lecture modules and classes will consist of 50 minute units.
In **preparation** you will be expected to have read the set reading for that week (if given).

Assessment:

Assessment is by an in-lecture test (30% of final mark), an in-class presentation (20% of final mark) and a final take-home assignment (50% of final mark). Each student's written assessments rely on knowledge acquired in the lecture, in class, and through the mandatory readings. The class presentation involves exposing a topic with the use of additional readings that are provided on Moodle.

Coursework Submission:

How to submit your essay using FASer (Online Coursework Submission)

You will be able to access the online submission via your myEssex portal or via `https://faser.essex.ac.uk`. FASer allows you to store your work-in-progress. This facility provides you with an ideal place to keep partially completed copies of your work and ensures that no work, even drafts, is lost. If you have problems uploading your coursework, you should contact ltt@essex.ac.uk. You may find it helpful to look at the FASer guide `http://www.essex.ac.uk/elen/student/ocs.shtm`. If you have any questions about FASer, please contact your administrator or refer to the handbook.

Under NO circumstances is your coursework to be emailed to the administrators or the lecturer. This will NOT be counted as a submission.

Coursework deadline policy for undergraduates

There is a single policy at the University of Essex for the late submission of coursework in undergraduate courses. Essays must be uploaded before 09.45 on the day of the deadline. All coursework submitted after the deadline will receive a mark of zero. The mark of zero shall stand unless the student submits satisfactory evidence of extenuating circumstances that indicate that the student was unable to submit the work prior to the deadline. For further information on late submission of coursework and extenuating circumstances procedures please refer to `http://www2.essex.ac.uk/academic/students/ug/extenug.html`. Essay feedback will be given via FASer. ALL submissions should be provided with a coversheet (Available from Moodle).

Plagiarism

Plagiarism is a very serious academic offence and whether done wittingly or unwittingly it is your responsibility. **Ignorance is no excuse!** The result of plagiarism could mean receiving a mark of zero for the piece of coursework. In some cases, the rules of assessment are such that a mark of zero for a single piece of coursework could mean that you will fail your degree. If it is a very serious case, you could be required to withdraw from the University. It is important that you understand right from the start of your studies what good academic practice is and adhere to it throughout your studies. The Department will randomly select coursework for plagiarism checks and lecturers are very good at spotting work that is not your own. **Plagiarism gets you nowhere: DON'T DO IT!**

Following the guidance on referencing correctly will help you avoid plagiarism. Please familiarise yourself with the University's policy on academic offences: `http://www.essex.ac.uk/academic/docs/regs/offpro.shtm`.

Extenuating circumstances for late submission of coursework

The university has guidelines on what is acceptable as extenuating circumstances for later submission of coursework. If you need to make a claim, you should upload your coursework to FASer and submit a late submission of coursework form which can be found here: `http://www2.essex.ac.uk/academic/students/ug/crswk_pol.htm`. This must be done within seven days of the deadline. FASer closes for all deadlines after seven days. The Late Submissions committee will decide whether your work should be marked and you will be notified of the outcome.

If you experience significant longer-term extenuating circumstances that prevent you from submitting your work either by the deadline or within seven days of the deadline, you should submit an Extenuating Circumstances Form for the Board of Examiners to consider at the end of the year.

Module Outline & Reading:

The following two books will be used in the course. In addition you will receive additional lecture materials online via Moodle.

- King, Gary, Keohane, Robert, and Verba, Sidney. 1994. *Designing Social Inquiry. Scientific Inference in Qualitative Research.* Princeton University Press.
- Kellstedt, Paul, and Whitten, Guy. 2013. *The Fundamentals of Political Science Research.* 2nd Edition. Cambridge University Press.

Please read the required reading(s) *before* class!

Sessions

I. Introduction

Week 2 Overview: What is Social Science and why it needs Scientific Reasoning

Required read: King, Gary, Robert O. Keohane, and Sidney Verba. Designing Social Inquiry. Scientific Inference in Qualitative Research. Princeton (NJ): Princeton University Press, 1994, Chapter 1 (pp. 3-28).

II. The Fundamentals of Scientific Knowledge

Week 3 Science vs Pseudo-science: Normativism vs Positivism, the Role of Uncertainty and Logical Processes

Required read: Popper, Karl R. The Logic of Scientific Discovery. New York: Harper & Row, 1959, Chapter 1 (pp. 3-26).

Additional read: Winch, Peter. The Idea of A Social Science and Its Relation to Philosophy (Second Ed.), 2003, Chapter 1 (pp. 1-33).

Week 4 Identifying Science: Puzzles, Paradigms, and Processes

Required read: Kuhn, Thomas S. The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 1962, Chapters 2-5 (pages 10-51).

Additional read: Alvesson, Mats and Sandberg, Joergen. 2011. Generating Research Questions Through Problematization. Academy of Management Review, 36(2): 247-271.

Week 5 Preparing for Scientific Discovery I: Anomalies, Research Questions, Theories

Required read: Kuhn, Thomas S. The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 1962, Chapters 6-7 (pages 52-76).

Additional read: Zinnes, Dina A. 1980. Three Puzzles in Search of a Researcher. International Studies Quarterly, 24: 315-342.

Week 6 Preparing for Scientific Discovery II: Empiricism and Falsification

Required read: Lakatos, Imre. "Falsification and the Methodology of Scientific Research Programmes," in Imre Lakatos and Alan Musgrave (eds.), Criticism and the Growth of Knowledge. Cambridge: Cambrige University Press, 1970, pp. 116-122, 132-138.

No additional reading because of review

Week 7 *In-Lecture Test*

Additional read: Grix, Jonathan. Introducing Students to the Generic Terminology of Social Research Politics, 2002, 22(3): 175-186.

III. The Road to Scientific Knowledge

Week 8 Inference: The Purpose of Scientific Research

Required read: Kellstedt, Paul, and Whitten, Guy. 2013. The Fundamentals of Political Science Research. 2nd Edition. Cambridge University Press, Chapter 1.

Additional read: Fearon, James D. 1991. Counterfactuals and Hypothesis Testing in Political Science. World Politics, 43(2): 169-195.

Week 9 Causality: The Fundamental Problem of Science

Required read: Kellstedt, Paul, and Whitten, Guy. 2013. The Fundamentals of Political Science Research. 2nd Edition. Cambridge University Press, Chapter 3.

Required read: King, Gary, Robert O. Keohane, and Sidney Verba. Designing Social Inquiry. Scientific Inference in Qualitative Research. Princeton (NJ): Princeton University Press, 1994, Chapter 3.

Additional read: Collier, David and Mahoney, James. 1996. Insights and Pitfalls: Selection Bias in Qualitative Research. World Politics, 49(1): 56-91.

Week 10 The Roadmap to Scientific Knowledge: Four Hurdles of Causal Inference

Required read: Kellstedt, Paul, and Whitten, Guy. 2013. The Fundamentals of Political Science Research. 2nd Edition. Cambridge University Press, Chapter 3.

Additional read: Przeworski, Adam. 2004. Institutions Matter? Government and Opposition, 39(2): 527-540.

IV. Conclusion

Week 11 Review and Questions