1. **Title of the module**

SOCI7440 (SO744) The Power and Limits of Causal Analysis

1. **School or partner institution which will be responsible for management of the module**

School of Social Policy, Sociology and Social Research

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 5

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn or Spring

1. **Prerequisite and co-requisite modules**

SOCI4100 An introduction to Quantitative Social Research,

OR

SOCI3420 A Short Introduction to Quantitative Social Research (summer school)

OR

An equivalent introduction to quantitative research (to the level of basic (OLS) regression).

1. **The programmes of study to which the module contributes**

BSc Statistical Social Research

Any programme that includes ‘with Quantitative Research’

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 Critically understand the limitations of simple regression when making causal claims, with particular attention to endogeneity/confounding and causal heterogeneity;

8.2 Critically understand the strengths and limitations of more advanced methods for investigating causality through quantitative research (e.g. experiments, instrumental variable approaches, matching methods, longitudinal analysis);

8.3 Demonstrate a basic ability to themselves apply these more advanced methods for investigating causality, using appropriate statistical software (e.g. Stata);

8.4 Demonstrate an ability to select the most appropriate design for investigating causality in real-world settings, given practical constraints;

8.5 Demonstrate an ability to critique causal claims made in public debates and in academic research;

8.6 Demonstrate an ability to present the rationale and results of more advanced statistical methods for investigating causality to non-technical audiences.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**

9.1 Demonstrate a basic ability to use advanced quantitative analytical skills for investigating causality in complex societal processes;

9.2 Understand the strengths and weaknesses of advanced quantitative methods of causal analysis, and apply sound judgement in real-world scenarios;

9.3 Demonstrate proficiency in the use of one or various statistical software packages (e.g. Stata).

1. **A synopsis of the curriculum**

This module aims to develop basic quantitative research skills (to the level of regression) to understand more advanced issues in making causal claims. Learning will be oriented towards:

• Understanding the limitations of simple (OLS) regression for making causal claims, with particular emphasis on endogeneity/confounding and causal heterogeneity;

• Learning a small number of advanced methods for investigating causality through quantitative research (e.g. experiments, instrumental variable approaches, matching methods, longitudinal analysis). For each method, students will first consider the rationale for the method (its strengths and limitations), and then use the method in hands-on statistical analysis sessions using appropriate statistical software (e.g. Stata);

• Towards the end of the module, students will learn how to decide the relative strengths and merits of each approach, and how to select the appropriate research design given the particular features of real-world scenarios.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Cartwright, Nancy (2013), ‘Knowing what we are talking about: why evidence doesn't always travel’. Evidence & Policy: A Journal of Research, Debate and Practice, Volume 9, Number 1, pp. 97-112.

Christenfeld, N., R. Sloan, et al. (2004). "Risk factors, confounding, and the illusion of statistical control." Psychosomatic Medicine 66: 868-875.

Cook, T., & Campbell, D. (1979) Quasi-experimentation: Design and analysis issues for field settings. Rand McNally College Publications.

Hedström, P and Ylikoski, P, (2010). ‘Causal Mechanisms in the Social Sciences’. Annual Review of Sociology, 36:49-67. DOI: 10.1146/annurev.soc.012809.102632

Jackson, M and Cox, DR (2013), ‘The Principles of Experimental Design and Their Application in Sociology’. Annual Review of Sociology, Vol. 39: 27-49.

Morgan, SL and Winship, C (2007), Counterfactuals and Causal Inference: Methods and Principles for Social Research.

Shadish, William R., Thomas D. Cook and Donald T. Campbell. 2002. Experimental and Quasi-experimental Designs for Generalized Causal Inference. Boston, MA: Houghton-Mifflin.

1. **Learning and teaching methods**

Total contact hours: 22

Private study hours: 128

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Report (2500 words) (55%)

Group Presentation (35%)

Class Participation (10%)

13.2 Reassessment methods

Reassessment Instrument: 100% coursework

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 9.1 | 9.2 | 9.3 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |
| Independent Study | X | X | X | X | X | X | X | X | X |
| Lectures | X | X |  |  | X |  | X | X | X |
| Seminars/Workshops | X | X | X | X | X | X | X | X | X |
| **Assessment method** |  |  |  |  |  |  |  |  |  |
| Class participation | X | X | X | X | X | X | X | X | X |
| Group Presentation | X | X |  |  | X | X | X | X |  |
| Personal study - report | X | X | X | X | X | X | X | X | X |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The discussion and analysis of the module topics are undertaken in an international context. The range of generic skills which will be developed are applicable to international contexts and the specific skills have potential international relevance.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 12/11/15 | Minor | January 2017 | 1 | No |
|  |  |  |  |  |

Revised FSO Jan 2018