1. **Title of the module**

SOCI5012 (SO5012) Analysing Data in the Real World

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

Law, Society and Social Justice: School of Social Policy, Sociology and Social Research

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

Level 6

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

30 credits (15 ECTS)

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

Autumn term (term 1) and Spring term (term 2)

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

SOCI3410 (SO341) Critical Thinking

SOCI6020 (SO602) Social Research Methods

OR

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

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

Compulsory Stage 3 module for any bachelor degree 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 Have a proficient ability to use appropriate statistical software (e.g. R);

8.2 Have a critical understanding of the limitations of common analytical techniques;

8.3 Critically understand the strengths and limitations of advanced methods for investigating causality

8.4 Demonstrate careful data visualisation skills in communicating quantitative research;

8.5 Demonstrate an ability to thoroughly critique quantitative analytical claims made in public debates and in academic research;

8.6 Demonstrate an ability to present the rationale and results of advanced statistical methods using a range of methods to non-technical audiences;

8.7 Be able to manipulate and clean data

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

9.1 Demonstrate an ability to use statistical packages to use, analyse and present quantitative data;

9.2 Critically understand the strengths and weaknesses of advanced quantitative methods, and apply sound judgement in real-world scenarios;

9.3 Demonstrate proficiency in the use of one or various statistical software packages;

9.4 Organise information clearly and persuasively communicate research using a variety of methods;

9.5 Create visualisations and presentations of analysis;

9.6 Work in a group and to produce clear communication using a variety of methods of research results.

1. **A synopsis of the curriculum**

This module aims to develop standard research skills into a quantitative research skillset that will enable the student to work with data, from working with different types of datasets/variables to analysing this data and presenting it in oral and written form.

Learning will be orientated towards:

* Learning ways to work with and manipulate datasets to make them ready for statistical analysis (i.e. to create tidy data)
* Critically understanding the limitations of simple (OLS) regression, with particular emphasis on endogeneity/confounding and causal heterogeneity;
* Learning a number of advanced methods for investigating the social world through quantitative research (e.g. associative and causal methods). 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. R);
* Learning how to communicate and present data and quantitative analysis (e.g. with various types of data visualisations).

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

Angrist, J.D. and Pischke, J.S., (2014). *Mastering 'metrics: the Path from Cause to Effect*. Princeton, Princeton University Press.

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

Grolemund, G. & H. Wickham. 2017. R for Data Science. <https://r4ds.had.co.nz/>

Healy, K. 2018. Data Visualization: A practical introduction. <https://socviz.co/>

Imai, K. 2018. Quantitative Social Science: An Introduction. <http://qss.princeton.press/>

Morgan SL (2nd edition 2015), *Counterfactuals and Causal Inference: methods and principles for Social Research*, New York, Cambridge University Press

Murnane, R.J. and Willett, J.B., (2010). *Methods Matter: Improving Causal Inference in Educational and Social Science Research*. Oxford University Press.

Robson, C and McCartan, K (2016), *Real-World Research: a resource for users of social research methods in applied settings* 4th edition, Chichester, Wiley.

1. **Learning and teaching methods**

Total contact hours: 66

Private study hours: 234

Total study hours: 300

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

Coursework - Seminar participation and related exercises - 20%

Coursework - personal report 1 (2000 words) - 20%

Coursework - Group presentation - 20%

Coursework - personal report 2 (3000 words) - 40%

13.2 Reassessment methods

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 | 8.7 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 | 9.6 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Private study | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lectures | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ |  | ✓ | ✓ |  |
| Seminars | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seminar participation and related exercises | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Personal report 1 -2000 words | ✓ | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
| Group presentation |  | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | ✓ |  | ✓ | ✓ | ✓ |
| Personal report 2 – 3000 words | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |

1. **Inclusive module design**

The Division/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 campus

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.

**DIVISIONAL 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 delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| EAP | Major | September 2020 | 6-10 | Yes |
|  |  |  |  |  |