1. **Title of the module**

ECON5800 (EC580) Introduction to Econometrics

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

School of Economics

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 and Spring

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

ECON3040 Principles of Economics or equivalent

ECON3050/ECON3060 Mathematics for Economics Mode A or B,

ECON3090 Statistics for Economics, or equivalent

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

This module is compulsory for all Single Honours degree programmes in Economics and is available as optional (elective) module for joint Honours Programmes in Economics.

The module is **NOT** available to students across other degree programmes in the University

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Identify and appreciate the different types of models, data and data sources in economics
   2. Demonstrate knowledge and understanding of the least squares estimator
   3. Apply econometric theory to economic models and data
   4. Interpret empirical results obtained from the application of econometric theory
   5. Apply tests of model adequacy, particularly tests of the basic assumptions of the classic linear regression framework
2. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Organise economic data and information so as to conduct basic econometric analysis.
   2. Address economic problems quantitatively and analytically
   3. Analyse economic data and empirical models to support their understanding of economics
   4. Write and present empirical material in a coherent and structured manner
   5. Plan work and study independently
3. **A synopsis of the curriculum**

The quantitative estimation and evaluation of economic models is an essential feature of the study and application of economics. This module provides an introduction to econometric theory and the application of econometric techniques to economic models and data. This is achieved by explaining key economic and econometric issues using applications of econometrics that quantify and evaluate economic theory and which provide an empirical evaluation of economic behaviour and the assessment of economic policy.

The module provides both an analytical and practical introduction to econometric theory, equipping students with the analytical tools to carry out applied econometric work and to explore more advanced areas of econometric theory at later stages of their chosen degree programme. The practice and application of econometrics is achieved using both Microsoft Excel and specialist econometric software (e.g. Eviews &/or Stata).

The topics considered in the module include:

* Models and data; ordinary least squares (OLS), properties of OLS, simple and multiple linear regression, inference, confidence intervals, hypothesis tests, multicollinearity, heteroscedasticity, autocorrelation, dummy variables, functional form, linear restrictions, diagnostic testing and basic panel data.

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

The main text for the module is:

• J Wooldridge (2016), Introductory Econometrics: A Modern Approach, 6th ed, Cengage

Other examples are

• C Dougherty (2011), Introduction to Econometrics, 4th ed, Oxford University Press

• D Gujarati (2015), Econometrics by Example, 2nd ed, Palgrave

• D Gujarati and D Porter (2010), Essentials of Econometrics, 4th ed, McGraw-Hill

• G Maddala and K Lahiri (2009), Introduction to Econometrics, 4th ed, Wiley

1. **Learning and teaching methods**

Total contact hours: 30 hours

Private study hours: 120

Total study hours: 150

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

Moodle Quiz (10%)

In Course Test 1 (45 minutes) (20%)

In Course Test 2 (45 minutes (20%)

Written Report (50%)

13.2 Reassessment methods

Reassessment Instrument: 100% written report

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| Lecture | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |
| Terminal Class | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** |
| Seminar | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| Moodle Quiz | **x** | **x** | **x** | **x** |  |  | **x** | **x** |  | **x** |
| 2 x ICT | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Written Report | **x** | **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 module provides students with the analytical and practical skills necessary to undertake empirical evaluation of (economic) data. It is a module based on methodology and as such transcends criteria pertaining to national frontiers and/or culture. In practice, data sources will have an international dimension

**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.**

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| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 25/04/17 | Major | September 2017 | 13, 14 | No |

Revised FSO Jan 2018