**Title of the module**

ECON3090 (EC309) Statistics for Economics

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

Human and Social Sciences

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

Level 4

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)**

Spring

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

None

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

This module is **compulsory** for all students studying single and joint honours degrees 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. Organise, describe and summarise data
	2. Understand the principles of probability

8.3 Understand the principles underlying sampling theory

* 1. Apply hypothesis testing and interval estimation to sample data
	2. Use regression analysis to consider relationships between two variables
1. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**
	1. Demonstrate numeracy and quantitative skills
	2. Demonstrate problem solving skills
	3. Apply statistical methods to analyse real world problems and issues
	4. Communicate economic and statistical arguments clearly
	5. Plan work and study independently
2. **A synopsis of the curriculum**

This module introduces students to the basic concepts of probability and statistics, with applications to a variety of topics illustrated with real data. The techniques that are discussed can be used in their own right to solve simple problems, but also serve as an important foundation for later, more advanced, modules. Importantly, the module serves as a prerequisite for Stage 2 econometric modules ECON5800 (EC580) and ECON5810 (EC581).

The module commences with an overview of descriptive statistics. It then considers the key ideas in probability theory before moving on to statistical inference - the science of drawing conclusions from data. The main topics covered in the module include:

* Graphical and numerical analyses of data
* The principles of probability
* Probability Density Functions
* Sampling and its use in inference
* Regression and correlation
1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Barrow, M. (2017) Statistics for Economics, Accounting and Business Studies, (7th ed), Longman

Wonnacott, T.H. and R.J (1990), Introductory Statistics for Business and Economics (4th ed.), Wiley

1. **Learning and teaching methods**

Total contact hours 32

Private study hours 118

Total study hours 150

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

Term-time problem sets 20%

In Course Test 105 minutes 20%

Examination 2 hours 60%

13.2 Reassessment methods

Reassessment Instrument: 100% exam

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** |  |  |  |  |  |  |  |  |  |  |
| Lectures | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |
| Seminars  | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| In-Course Test | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Problem Sets | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** |
| Examination | **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 studies examples of statistical concepts and methods with a focus on examples and data from the United Kingdom and the rest of the world. The module develops skills and techniques that are globally transferrable.

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**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) |
| 19/07/16 | Minor | September 2016 | 1 | No |
| 12/03/20 | Minor | September 2020 | 10,13,14 | No |

Revised FSO Jan 2018