1. **Title of the module**

ECON3120 (EC312) Strategy and Games

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

Division of 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)**

Autumn or Spring Term

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

None

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

This module is optional for all students studying single and joint honours degree programmes in economics.

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Demonstrate knowledge and understanding of the basic principles of game theory
   2. Describe how game theory and experiments can be applied to real world phenomena
   3. Introduce the concepts relevant to a game and/or experiment
   4. Predict and model decision-making processes using game theory methods and tools
   5. Evaluate economic behaviour and phenomena using a game theoretic approach
2. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Utilise social science concepts and theories in decision-making situations
   2. Address an economic problem using deductive and inductive reasoning
   3. Develop logical and coherent arguments by a variety of methods
   4. Plan work and study independently
3. **A synopsis of the curriculum**

The module introduces students to the exciting fields of game theory, experimental economics and behavioural economics, and equips them with all the essential tools to analyse strategic interaction, in economics, politics and other social sciences. The module provides an understanding of the basic principles of game theory as well as experience in the practical issues of experimental economics. The emphasis throughout the module is on discussing practical applications and providing hands-on experience of experimental economics and game theory.

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

* T. Bergstrom and J. Miller (2000), Experiments with Economic Principles: Microeconomics, McGraw-Hill.
* E. Cartwright (2011), Behavioural Economics, Routledge
* Dixit, A. and S. Skeath (2006), Games of Strategy (2nd ed.), Norton
* J. Harrington (2009), Games, Strategy and Decision Making, Palgrave.
* C. Holt (2006), Markets, Games and Strategic Behavior, Addison Wesley
* P. Straffin (1995), Game Theory and Strategy, Mathematical Society of America

1. **Learning and teaching methods**

Total contact hours: 22 hours

Private study hours: 128

Total study hours: 150

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

Moodle Quiz (20%)

Experiment Log Book (2000 words) (30%)

Experiment report (2000 words) (50%)

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)***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |
| Lecture | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Seminar | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |
| *Moodle Quiz* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Log-book* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *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**

Game theory is a branch of mathematics and global language which is used internationally.

**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 the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 19/07/16 | Minor | September 2016 | 1 | No |
| 11.02.21 | Minor | September 2020 | 13, 14 | No |
| 21.07.21 | Minor | September 2021 | 7, 9,14 | No |