1. KentVision Code and title of the module

ECON8830 Advanced Microeconomics and Game Theory

## Division and School/Department or partner institution which will be responsible for management of the module

Division of Human and Social Sciences, School of Economics

## The level of the module (Level 4, Level 5, Level 6 or Level 7)

Level 7

## The number of credits and the ECTS value which the module represents

15 Credits (7.5 ECTS)

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

Autumn

## Prerequisite and co-requisite modules and/or any module restrictions

None

## The course(s) of study to which the module contributes

***Optional to the following courses:***

PhD Economics

PhD Agri-environmental Economics

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

8.1. Explain in detail fundamental microeconomic and game theoretic concepts.

8.2. Critically assess commonly used game theoretic models.

8.3. Apply economic theory and game theory in studying novel decision making contexts.

8.4. Interpret and critically understand cutting edge microeconomic theoretical research

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

9.1. Have developed numeracy and problem solving skills.

9.2. Comprehensively present economic arguments via a variety of methods

9.3. Model and analyse interactive situations using game theory.

9.4. Have developed independent learning skills.

## A synopsis of the curriculum

The objective of this module is to bring students' ability in microeconomic theory up to the standard required for independent research. It builds on the microeconomics that would be covered in a standard MSc program. Concepts that a student should be familiar with, like Nash equilibrium, will be covered in more depth. Students will also be exposed to concepts that are at the forefront of modern research but not typically covered at the MSc level, such as psychological game theory, learning in games, and cooperative game theory. Specific topics will include:

* + - Revealed preference.
    - Choice with risk and uncertainty including prospect theory and preference reversals.
    - Nash equilibrium, refinement and selection
    - General Equilibrium
    - Principal-agent problem including signalling and screening
    - Repeated and dynamic games and learning and communication in games
    - Collective action problems
    - Networks
    - Mechanism design

## Reading list

## The University is committed to ensuring that core reading materials are in accessible electronic format in line with the Kent Inclusive Practices.

## The most up to date reading list for each module can be found on the university's [reading list pages](https://kent.rl.talis.com/index.html).

## Contact Hours

Private Study: 130

Contact Hours: 20

Total: 150

## Assessment methods

* 1. Main assessment methods:

Presentation (25 minutes) and Referee Report (50%)

Five Individual Problem Sets (10% each)

13.2 Reassessment methods

Reassessment Instrument: 100% coursework

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

**Module learning outcomes against learning and teaching methods:**

| **Module learning outcome** | **8.1** | **8.2** | **8.3** | **8.4** | **8.5** | **9.1** | **9.2** | **9.3** | **9.4** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Private Study** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Lectures** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Seminars** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | **8.1** | **8.2** | **8.3** | **8.4** | **9.1** | **9.2** | **9.3** | **9.4** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Presentation and Referee Report** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Problem Sets** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

## Inclusive module design

The Division 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

## Campus(es) or centre(s) where module will be delivered

Canterbury

## Internationalisation

The subject content of the module provides critical insight into microeconomic theory and its application to diverse real-world situations. Microeconomic theory topics and policy issues are considered in both a national and international context (see module synopsis.

**DIVISIONAL USE ONLY**

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

| **Date approved** | **New/Major/Minor revision** | **Start date of delivery of (revised) version** | **Section revised (if applicable)** | **Impacts PLOs (Q6 & 7 cover sheet)** |
| --- | --- | --- | --- | --- |
| 27/01/2019 | Major | September 2019 | 8, 9, 10, 11, 12, 13 |  |
| 13/11/2022 | Minor | September 2023 | 9,13.1,14 | No |