

# **Course information 2019–20 EC2066 Microeconomics**

This course is designed to equip students with the economic principles which are necessary to analyse a whole range of economic problems. It builds on the foundations of economic analysis provided in course EC1002 Introduction to economics.

# **Prerequisite**

If taken as part of a BSc degree, courses which must be passed before this course may be attempted:

EC1002 Introduction to economics and either MT105a Mathematics 1 or MT1174 Calculus

#### **Exclusions**

This course may not be taken with MN2028 Managerial economics

# Aims and objectives

- To deepen the understanding of the basic theory of optimization by economic agents and the efficiency of the resulting outcome for the market as a whole
- To introduce students to the analysis of strategic interaction as well as interaction under asymmetric information
- to clarify the role of economic policies as tools to improve efficiency in the presence of market failures
- to promote the ability to think in a structured framework, and clarify the importance of formal arguments
- to demonstrate the art of modelling which requires simplifying a problem by identifying the key elements without oversimplifying the issue.

#### **Assessment**

This course is assessed by a three-hour unseen written examination.

## **Learning outcomes**

At the end of this course and having completed the essential reading and activities students should:

be able to define and describe:

- the determinants of consumer choice, including inter-temporal choice and choice under uncertainty
- the behaviour of firms under different market structures
- how firms and households determine factor prices
- behaviour of agents in static as well as dynamic strategic situations
- the nature of economic interaction under asymmetric information
- be able to analyse and assess:
  - efficiency and welfare optimality of perfectly and imperfectly competitive markets
  - the effects of externalities and public goods on efficiency
  - the effects of strategic behaviour and asymmetric information on efficiency
  - the nature of policies and contracts aimed at improving welfare
- be prepared for further units which require a knowledge of microeconomics.

### **Essential reading**

For full details please refer to the reading list. Nicholson and Snyder *Intermediate*Microeconomics and its Application, 12<sup>th</sup>ed 2015, Cengage Learning

Students should consult the *Programme Regulations for degrees and diplomas in Economics, Management, Finance and the Social Sciences* that are reviewed annually. The Prerequisites and Exclusions are subject to confirmation in the *Regulations*. Notice is also given in the *Regulations* of any courses which are being phased out and students are advised to check course availability.

## **Syllabus**

This is a description of the material to be examined. On registration, students will receive a detailed subject guide which provides a framework for covering the topics in the syllabus and directions to the essential reading.

The unit examines how economic decisions are made by households and firms, and how they interact to determine the quantities and prices of goods and factors of production and the allocation of resources. Further, it examines the nature of strategic interaction and interaction under asymmetric information. Finally, it investigates the role of policy as well as economic contracts in improving welfare. The topics covered are:

- Consumer choice and demand, labour supply
- Choice under uncertainty, the expected utility model
- Producer theory: production and cost functions, firm and industry supply.
- Game theory: normal-form and extensiveform games, Nash equilibrium and subgame perfect equilibrium, repeated games and cooperative equilibria
- Market structure: competition, monopoly and oligopoly.
- General equilibrium and welfare: competitive equilibrium and efficiency
- Pricing in input markets
- Inter-temporal choice: savings and investment choices.
- The economics of information: moral hazard and adverse selection, resulting market failures and the role of contracts and institutions
- Market failures arising from monopoly, externalities and public goods. The role of policy.

A knowledge of constrained maximisation and Lagrangian functions as covered in MT105A Mathematics 1 would be helpful for students taking this subject.