University College London Department of Economics

Intermediate Microeconomics: Microeconomics of the Firm (ECON0015)

Please note this is Part 1 of the full year course Microeconomics (ECON0013).

Aims: This course is designed to provide students with a rigorous grounding in the core concepts and methods of microeconomics. At the end of the course, a student should:

- Understand microeconomic theory at a level appropriate for an economics graduate.
- Understand how to analyze these models using the relevant techniques.
- Be able to address economic phenomena using these techniques.
 - **Texts:** The main text is: Microeconomics: Principles and Analysis [F. Cowell, OUP 2006]. This can be supplemented with the easier books: Microeconomic Theory: Basic Principles and Extensions [Nicholson, South-Western 2005] and Intermediate Microeconomics [Varian, Norton 2003]. A more advanced book for an ambitious student is: Microeconomics [Gravelle and Rees, Pearson 2004].

Typical Assessment:

60% Take Home Examination 40% Multiple Choice Question (MCQ) Test

Course Outline:

Term 1:

- I.1 Games in Strategic Form
 - I.1.1 Describing games in strategic form
 - I.1.2 Dominance and Nash equilibrium
 - I.1.3 Finding Nash equilibria
 - I.2 Games in Extensive Form
- I.2.1 Extensive form games
 - I.2.2 Nash equilibrium and backwards induction
 - I.2.3 Subgame perfect equilibrium
- I.3 Monopoly and Oligopoly
 - I.3.1 Monopoly
 - I.3.2 Static oligopoly
 - I.3.3 Dynamic oligopoly
- I.4 Perfect competition
 - I.4.1 Production sets and functions
 - I.4.2 Profit maximisation
 - I.4.3 Cost minimisation
- I.5 Adverse Selection
 - I.5.1 Lemons and risk
 - I.5.2 Insurance and market failure
 - I.5.3 Two part tariffs
 - I.5.4 Optimal screening
- I.6 Moral Hazard
 - I.6.1 Introduction and bank loans
 - I.6.2 Contracts and risk neutrality
 - I.6.3 Contracts and cost of risk
- I.7 Economic Design and Mechanisms
 - I.7.1 Mechanisms
 - I.7.2 Auctions