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