Part IIA Outlines

Part IIA Paper 1 Microeconomics

Paper Coordinator: Dr M Elliott (mle30@cam.ac.uk)

Paper Content
This course builds on the material taught in Part I, Paper 1. It provides a rigorous foundation in the following core concepts of intermediate level microeconomic theory: social choice and welfare, game theory, and information economics. The first, and main, part of the first lecture course will develop the foundational concepts underlying game theory. This will include setting up simultaneous and sequential move games, and developing solution concepts to predict equilibrium play. Applications spanning many subjects will be covered, but with a particular focus on applications from industrial organisation. Lent term will cover the theory of uncertainty, asymmetric information, and various applications such as insurance markets, auctions, incentive contracts and markets for information. Upon completion of the course students will have been exposed to all important concepts currently considered to form the main body of microeconomic theory.

Objectives
This course provides the basis for the material taught in both the more applied and the theoretical papers in Part IIB. At the end of the course students should have:

- a critical perspective on the assumptions underlying microeconomic models;
- a thorough understanding of, and the ability to model formally, core microeconomic concepts such as efficiency, strategic interaction and asymmetric information; and
- the ability to apply these concepts and models to a diverse range of market and economic settings.

Lecture Courses
Game Theory, Welfare, & Applications (Dr M. Elliott, 20 hours, weeks 1-8, Michaelmas Term)
Economics of Uncertainty and Information (Prof L Felli, 20 hours, weeks 1-8, Lent Term)

Selective Reading List
There are many good game theory and microeconomic theory textbooks. The course lecture notes will be the primary source of information, but the following textbooks may provide useful additional material.

Game Theory
- Martin Osborne, An Introduction to Game Theory, OUP, 2004 [17F238].
- Avinash Dixit and Susan Skeath, Games of Strategy, 2nd ed., Norton, 2004 [70F166B].

Social Choice

**Economics of uncertainty and information**

*There are additional readings in the course handouts.*

**Supervisions**
Supervisions are arranged by Directors of Studies.

**Examination**
The content of the course changed a few years ago, and the order in which material is taught changed. The most relevant past examinations are for the last four or so years for the first lecture course, and or the last five or so years for the second lecture course. Older exam papers may also be useful. For the first lecture course, see Part I, Paper 1 (excluding the last four or so years). Past examination papers are available from the Faculty website.

For details of the examination structure, please refer to the Form and Conduct Notice pages on Moodle.