

**Part IIB Paper 4 Economic Theory and Analysis**  
**Paper Co-ordinator: Professor Robert Evans**

**Paper Content**

The paper deals with theoretical economic models and their analysis, going beyond the material taught in Part IIA, Paper 1. An aptitude and taste for logical thinking are essential and fluency in elementary mathematics (algebraic equations, graphs, basic calculus) is required.

**Aims**

The paper introduces some of the most important concepts and methods of economic theory. It aims to show how economic models are formulated, and their implications derived; and to acquaint participants with a number of particularly important models in economics.

**Objectives**

Participants should have acquired a basic understanding of the following topics, together with the ability to solve simple models relevant to them:

- The basic concepts of game theory, in one-shot and extensive-form games of complete and incomplete information, together with applications.
- General equilibrium theory with applications in finance.
- Networks and experimental methods in economics.

**Lecture Courses**

**Game Theory with Applications** (Prof R Evans, 14 lectures, Michaelmas Term)

**General Equilibrium and Finance** (Prof C Harris, 10 lectures, Lent Term)

**Networks and Experiments** (Dr E Gallo, 10 lectures, Lent Term)

**Reading**

Ken Binmore, *Playing for Real: A Text on Game Theory*, OUP 2007

Martin Osborne, *An Introduction to Game Theory*, OUP 2003

David Kreps, *A Course on Microeconomic Theory*. Princeton University Press.

Vijay Krishna, *Auction theory*. Academic Press

Sanjeev Goyal, *Connections: an introduction to the economics of networks*. Princeton University Press.

**Supervisions**

Suggested supervision assignments will be posted by the course lecturers over the course of the term. Supervisions are organised by your Director of Studies.

**Examinations**

The examination paper requires students to answer 4 out of 8 questions. Past examination papers are available from the Faculty's website.