Course Outline 2016

ECON 701: MICROECONOMIC THEORY (15 POINTS)

Semester 1 (1163)

Course Prescription
Advanced treatment of traditional topics from "core" microeconomics, including consumer theory and duality, expected utility theory, general equilibrium, game theory and the economics of information.

Programme and Course Advice
It is assumed that students taking this course have obtained a good grade in ECON 381 Foundations of Economic Analysis. It is especially important that students have a thorough grasp of the mathematics of constrained optimisation (Lagrange's method). In addition to the lecture notes from ECON 381, the Recommended Text by Dixit is an excellent place to review these ideas prior to the start of ECON 701.

Goals of the Course
This course is designed to introduce students to some central themes and results in graduate microeconomic theory. The chosen topics are also important for understanding many applied fields, such as labour economics, industrial organisation, international trade and public economics.

Learning Outcomes
By the end of this course it is expected that the student will have a thorough grasp of the theory of consumer behaviour. In particular, students will:
1. be able to apply the mathematics of constrained optimisation (especially Lagrange's method) to solve microeconomic problems; and
2. be familiar with the basics of duality theory.

Decision-making under uncertainty is especially important to many applications of microeconomic theory, so students will:
3. develop a thorough understanding of the expected utility model, and become familiar with its uses in economic analysis.

Students will learn how to:
4. work with the general equilibrium framework;
5. identify Pareto optimal allocations; and
6. compute equilibrium prices.

It is also important that students:
7. become familiar with the basic Welfare Theorems.
Learning Outcomes continued
The rest of the course will cover more recent ideas. Students will:
8. acquire a basic toolkit from game theory;
9. develop skills in the translation of economic problems into game-theoretic notation;
10. be able to select an appropriate solution concept; and
11. be able to compute equilibrium strategies.

Students will develop a thorough understanding of:
12. the basic moral hazard problem, its extensions and applications; and
13. the basic adverse selection problem, its extensions and applications.

Content Outline
The following is an approximate guide only:
Weeks 1-3: Decision-making by consumers and firms
Week 4: Choices under uncertainty
Weeks 5-6: Markets, welfare and equilibrium
Weeks 7-9: Game theory: solution concepts for normal and extensive forms
Weeks 10-12: Contract Theory and Information Economics

Learning and Teaching
This course will be taught in the first semester. Expected class size is around 35 students. There will be 3 hours of lectures per week. There will also be one tutorial session offered each week (Thursday, 10.00am to 11.00am) to review lecture material.

Teaching Staff
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Learning Resources
Prescribed Text:

Recommended Text:

Other Useful References:
A. Mas-Colell, M.D. Whinston and J.R. Green, Microeconomic Theory, Oxford University Press, 1995. [AVAILABLE ON SHORT LOAN: 338.5 M39]
Assessment
Final Examination: 60% of final grade;
Coursework: 40% of final grade (4 Assignments worth 5% each, Test worth 20%).

More details will be provided at lectures and on CANVAS.

Plussage does not apply.

Assignments are primarily tools with which to develop problem-solving skills. Assignment problems will require students to apply techniques studied in lectures or from the textbook. Students may work together on assignment problems, though each student is expected to write up his or her own final draft. The Test and Final Examination will assess general understanding and knowledge of the material, plus facility with the basic tools of microeconomic analysis.

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