EC 402 Microeconomic Theory
Winter Semester 2009

This one semester course in Microeconomic theory equips the student with the tools of Microeconomics that allow him or her to tackle more specialized courses in General Equilibrium Theory, Game Theory, Industrial Organization and Social Choice Theory that are offered in the second year of the masters program. The emphasis is on the basics and most of the course deals with teaching the student unifying generalizable concepts that are common to different topics in the theory without going into too much stylized detail with respect to individual topics. The treatment is mathematical and assumes knowledge of basic analysis, linear algebra and probability.

Evaluation: Mid-semester examination, End-semester examination

Textbooks:

Hal R. Varian, Advanced Microeconomics 3rd Ed., W.W. Norton, 1992

Andreu Mas-Collel, Michael D. Whinston and Jerry R. Green, Microeconomic Theory, Oxford University Press, USA, 1995

Geoffrey A. Jehle and Philip J. Reny, Advanced Microeconomic Theory, 2nd ed., Addison Wesley, 2000

List of Topics:

1. Consumer Behaviour
- Preferences and utility
- Demand functions
- Duality
- Revealed Preference
- Consumer Surplus

2. Production
- Production sets and functions
- Profit maximization and cost minimization
- Duality
- Homogeneous and homothetic technologies
- Profit and cost functions

3. Choice under uncertainty
- Expected utility theory and the independence axiom
- Money lotteries and risk aversion
- The insurance problem
- First and second order stochastic dominance.

4. Firm behaviour
- Competitive firm
- Monopoly

- Oligopoly models – Cournot and Bertrand equilibrium.

5. General equilibrium theory
- Exchange equilibrium
- Pareto efficiency
- Welfare theorems
- Walrasian equilibrium and the core

6. Game Theory and information
- Simultaneous move games and Nash equilibrium
- Sequential games and subgame perfectness
- Incomplete information games and perfect Bayesian equilibrium
- Adverse selection, moral hazard and signaling models.