

# 5330 Advanced Microeconomic Theory

Time: Fall 2023, Quarter 1,

Instructor: Professor Paul S. Segerstrom

Purpose: The aim of the course is to equip the student with a basic grasp of the tools of modern microeconomic theory.

Content: The course covers the modern theory of consumer and producer behavior, with special emphasis on problem-solving. Topics discussed include: Preferences and utility, indirect utility and expenditure, consumer demand, production, cost, duality in production, the competitive firm, perfect competition, monopoly, oligopoly, monopolistic competition, efficiency of the competitive outcome, general equilibrium in an exchange economy, general equilibrium with production and the welfare theorems.

Intended Learning Outcomes:

1. The student should be familiar with models of competition under different market structures.
2. The student should be able to solve consumer utility maximization problems, firm profit maximization problems, and find the equilibrium outcomes under partial equilibrium and under general equilibrium.

Format & Structure: The course consists of lectures and discussion of solutions to problem sets.

Prerequisites: The student is expected to be familiar with microeconomic theory at the intermediate level

Final Grade: Based on a final examination (75%) and homework assignments (25%).

Course Literature: The course is based on a textbook

**Geoffrey A. Jehle and Philip J. Reny (2011), *Advanced Microeconomic Theory*, third edition, Pearson, ISBN 978-0-273-73191-7 paperback.**

The textbook can be purchased at Akademibokhandeln, Mäster Samuelsgatan 28, Stockholm or at [www.amazon.co.uk](http://www.amazon.co.uk)

Optional Course Literature: The Jehle & Reny textbook should be read together with a good mathematics textbook. Among the many good math textbooks out there, my personal favorite is

**Malcolm Pemberton and Nicholas Rau (2016), *Mathematics for Economists: An Introductory Textbook*, fourth edition, Manchester University Press, ISBN 978 1 7849 9148 7 paperback.**

This textbook can also be purchased at Akademibokhandeln, Mäster Samuelsgatan 28, Stockholm. I use it as the main text in the course 5311 International Trade.

## 1. The Consumer

- Preferences and Utility, Jehle & Reny, pages 3-19, 495-520, 529-545.
- Indirect Utility and Expenditure, Jehle & Reny, pages 19-48, 521-522, 551-607.
- Consumer Demand, Jehle & Reny, pages 48-63.

## 2. The Producer

- Production, Jehle & Reny, pages 125-135.
- Cost, Jehle & Reny, pages 135-143.
- Duality in Production, Jehle & Reny, pages 143-145.
- The Competitive Firms, Jehle & Reny, pages 145-154.

## 3. The Market

- Perfect Competition, Jehle & Reny, pages 165-170.
- Monopoly, Jehle & Reny, pages 170-173.
- Oligopoly, Jehle & Reny, pages 174-177.
- Monopolistic Competition, Jehle & Reny, pages 177-179.
- Efficiency of the Competitive Outcome, Jehle & Reny, pages 179-188.

## 4. The Competitive Market System

- General equilibrium in an exchange economy, Jehle & Reny, pages 195-212, 522-528.
- The welfare theorems, Jehle & Reny, pages 212-219.
- General equilibrium with production, Jehle & Reny, pages 220-251.