Course description. This is the first of two required Ph.D. core theory courses in microeconomics. The objective is to introduce the students to the standard problems of microeconomics, and to develop concepts and skills useful for advanced analysis in all areas of economics. The course will emphasize single-agent optimization problems, including decisions under uncertainty, but will also provide an introduction to aggregation issues and (partial) equilibrium analysis.

Prerequisites. This course presumes knowledge of intermediate microeconomics, as well as basic mathematical skills suited for graduate work in economics (in particular, students should be proficient on the topics covered in the “Math Camp” offered in the first two weeks of August). The material covered in the first part of Economics 600 is also particularly useful for this course.

Grades: 10 % homework (problem sets and lab sessions)
         35 % midterm exam -- Tuesday, October 16, 9:00 am - 10:50 am
         55 % final exam -- Thursday, December 13, 1:30 am - 4:30 am

Homework. Problem sets will be assigned each week and posted on the course web page. You are asked to work through all of the problems and to turn in your answers. Answers are due on Fridays, by 12:00 noon, in the T.A.’s mailbox. These problems will be discussed at the Friday lab session. Your assignment will not be graded—the portion of your grade assigned to homework will simply depend on your handing in your answers to each question and on your active participation in the Friday lab sessions.
**Required textbook**


**Recommended textbook**


**Other useful books**

Graduate microeconomics:


Mathematical economics:


Undergraduate microeconomics:


Note: These books are available in “Reserve” in the main library.

**Topics Outline**

**Taught by professor Volij:**

1. **Theory of the Consumer:**
   - Revealed Preferences
   - Utility and Classical Demand Theory
   - Consumer's Welfare Evaluation
   - Duality

**Taught by professor Moschini:**

2. **Theory of the Firm:**
   - Technology
   - Profit Maximization and the Profit Function
   - Cost Minimization and the Cost Function

3. **Partial Equilibrium:**
   - Competitive Markets
   - Monopoly
   - Welfare comparisons

**Taught by either professor Volij or professor Moschini**

4. **Uncertainty and Risk:**
   - The Expected Utility Model
   - Risk Aversion
   - Selected Applications