

Economics 4161
Fall Semester 2020, Session I
Instructor: Jan Werner

September 8–October 22
T.Th. 2:30 - 3:45 PM, CSOM L-110

Microeconomic Analysis

The main subject of the course is choice in markets under certainty and uncertainty. We consider consumption choice under certainty, saving choice over time, and portfolio choice under uncertainty. We focus on the issue of rationalizability of choices by preferences, that is, on identification of preferences from choice behavior. This choice-based approach in consumer theory is called the revealed preference. It relies primarily on algebraic methods of the analysis of consumer choices.

The course introduces expected utility under uncertainty with its axiomatizations, and some alternative specifications of preferences under uncertainty. Theories of risk aversion and choice of portfolio of risky assets are discussed as well.

Prerequisites for the course include multivariate calculus and linear algebra.

The recommended text for this course is *Microeconomic Theory*, by A. MasColell, M. Whinston, and J. Green, Oxford, 1995, in particular Chapters 1-6.

Course Outline:

1. Preference and Choice.
MWG, Chapter 1
2. Consumer Demand and the Revealed Preference.
MWG, Chapter 2, Sections 3.C & 3.J.
3. Intertemporal Utility and Savings.
Lecture Notes
4. Choice under Uncertainty: Expected Utility, Risk Aversion, and Ambiguity.
MWG, Chapter 6 & Lecture Notes
5. Portfolio Selection and the Revealed Preference under Uncertainty.
Lecture Notes
6. Production. (Time permitting)
MWG, Chapter 5

Office Hours, Course Website, Recitation, and T.A.

Professor's office hours: Mondays, 1:00-2:00 p.m, Zoom
Email: jwerner@umn.edu
Website: www.econ.umn.edu/~jwerner

Course Website: Canvas
Teaching Assistant: Fernando Arce Munoz
Email: arcex017@umn.edu
Office Hours: TBA

Recitation place and time: Wednesday, 4:30 - 5:45 pm, Rm TBA

Exams and Grades

There will be a midterm and a final exam. Weekly homework will be given. Homework must be handed in on time.

Grades will be determined on students' performance on:

Homework - 20%

Midterm - 30%

Final - 50%

or

Homework - 20%

Final - 80%,

whichever is better.

COVID-19 Restrictions:

Students are expected to practice **physical distancing** and wear appropriately protective **face coverings** in the classroom, in compliance with University of Minnesota policies. Failure to comply with expected safety measures (face covering and social distancing) may result in a student conduct code violation and reporting to the Office of Community Standards.

Incomplete Grades, Make-up Exams, and Scholastic Dishonesty:

See Department of Economics Procedures and Policies 2020-2021.

Supplementary Course Material:

Sundaram, R. K., *A First Course in Optimization Theory*, Cambridge U. Press, 1996.

Kreps, D., *Microeconomic Foundations I: Choice and Competitive Markets*, Princeton U. Press, 2013.

Rubinstein, A., *Lecture Notes in Microeconomic Theory*, Princeton U. Press, 2012.