

Economics 310-2: Intermediate Microeconomics II

Northwestern University, Winter 2021

Time: 2:00-3:20 Tuesday/Thursday

Yingni Guo

Office hours: by appointment

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Course description: This course introduces the major topics of microeconomics that are not covered in 310-1. It intends to provide students with analytical tools to understand various economic phenomena. Among the topics covered are: competitive equilibrium in perfectly competitive markets, game theory, oligopoly (Cournot, Bertrand and Stackelberg models), risk and uncertainty, asymmetric information, and social choice theory.

Prerequisite: The economics requirement for this course is Econ 310-1. We will use the optimization techniques covered in Econ 310-1 to analyze the behavior of supply, demand, and prices in the whole economy. Notes from Econ 310-1 are in general good references when you want to familiarize yourself with these techniques as well as the basic concepts covered in consumer theory/producer theory.

The mathematics requirement for this course is single-variable calculus. We will use some elementary techniques from multi-variable calculus. However, there is no need to take multi-variable calculus before taking Econ 310-2. There will be nothing conceptually new in what we do – the techniques from multi-variable calculus used here will involve nothing other than taking one single-variable derivative.

Textbooks: No textbook is assigned for this class. If you prefer to have a textbook, any one of the following four would be good:

- Jeffrey M. Perloff, *Microeconomics: Theory and Applications with Calculus* (Pearson/Addison-Wesley, 5th edition, 2019).
- Walter Nicholson and Christopher Snyder, *Microeconomic Theory: Basic Principles and Extensions* (Thomson/South-Western, 12th edition, 2016).

- Hal R. Varian, *Intermediate Microeconomics: A Modern Approach* (Norton, 9th edition, 2014).
- David Besanko and Ronald Braeutigam, *Microeconomics* (Wiley, 6th edition, 2020)

Look carefully online for a reasonable price. Previous editions are generally a good substitute for the latest edition.

Discussion sessions and office hours: Each week, Maria and Yijun will lead discussion sessions. The discussion session will primarily discuss the past problem sets, and elaborate and discuss the material from the lectures. Discussion sessions are an especially useful opportunity to work through problems and seek answers to questions. Each week, Yoshi will run office hours.

Teaching assitant	Email
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Discussion sessions:

- Mon 3:00PM - 3:50PM (Yijun)
- Mon 4:00PM - 4:50PM (Maria)
- Wed 8:00AM - 8:50AM (Maria)
- Wed 3:00PM - 3:50PM (Yijun)

Office hours:

- Tue 4:00PM - 6:00PM (Yoshi)
- Wed 4:00PM - 6:00PM (Yoshi)

Requirements: Grades will be based on:

20%: Problem sets

30%: Midterm exam: Thursday, Feb 11, 2:00PM - 3:20PM

50%: Final exam: Thursday, March 18, noon - 2:00PM

Due to the substantial costs and difficulties of marginal exam administration, there will be no make-up written exams. In the unlikely event that you cannot take the midterm exam for a legitimate, approved, and documented reason (e.g., illness or emergency), please contact us (or

the Economics Department) prior to the start of the exam. We will reweigh your other graded components (the new weights would be 80% Final Exam and 20% Problem Sets). A zero exam score will be assigned if you miss the midterm exam for an unexcused reason.

The university allows no exceptions to the published final examination schedule, so you must take the final exam at the appointed hour. Please do not ask to take the final at a different time. In the unlikely case that you cannot take the final exam at the regular time, we will assign an incomplete grade of “X” (which is what you would receive if you were ill and didn’t show up for the final). You may take the final exam given by the instructor in the spring quarter as a make-up exam.

If you have questions about exam grading. You should first compare your answer to the posted solution. If you would like a score to be reconsidered, the next step is to submit your exam and a written request, explaining why you think reconsideration is appropriate, to your TA. In order to consider all such requests together and in a timely manner, requests must be submitted by the end of the week in which grades are assigned. Adjustments in partial credit are typically not made. If an adjustment is made, the exam may be referred to an independent grader, who will review the question and assign a replacement grade that may be higher or lower than the original.

Problem sets: Problem sets and their due dates are listed in the Schedule below. You can download them on the dates they are assigned. Answers will typically be posted the day the problem set is due. Problem sets must be received *by 4PM (central time)* on the day the problem set is due. Late problem sets will not be accepted. When computing the average problem set score to enter your grade, we will drop your lowest individual score. This allows you to miss a problem set, if necessary, without adverse consequences.

Schedule: The lectures constitute the core element of the course. The following is an outline of the course schedule:

Week 1 (Jan 12, Jan 14): Competitive equilibrium

Week 2 (Jan 19, Jan 21): Competitive equilibrium (Problem set 1, due Thursday)

Week 3 (Jan 26, Jan 28): Game theory (Problem set 2, due Thursday)

Week 4 (Feb 02, Feb 04): Game theory (Problem set 3, due Thursday)

Week 5 (Feb 09, Feb 11): Game theory (Problem set 4, for practice only; *Midterm on Thursday*)

Week 6 (Feb 16, Feb 18): Uncertainty/Asymmetric information (Problem set 5, due Thursday)

Week 7 (Feb 23, Feb 25): Asymmetric information (Problem set 6, due Thursday)

Week 8 (Mar 02, Mar 04): Asymmetric information/Social choice (Problem set 7, due Thursday)

Week 9 (Mar 09, Mar 11): Social choice (Problem set 8, for practice only)

Week 10: Final exam (Thursday, March 18, noon - 2:00PM.)