Economics 310-2: Intermediate Microeconomics II

Northwestern University, Fall 2022

Prof. Piotr Dworczak

Logistics

Time: Tue/Thu, 11:00AM-12:20PM

Location: Lutkin Hall

Office hours: Thu, 3:30PM-4:30PM (KGH 3359)
Fri, 4:00PM-5:00PM (Zoom)

Teaching assistants:

Felipe Durazzo: FelipeDurazzo2019@u.northwestern.edu
Office hours: Wed 3:00PM in KGH 3368

Tom Fisher: TomFisher2025@u.northwestern.edu
Office hours: Fri 3:00PM in KGH 3198

Shuyan Huang: ShuyanHuang2025@u.northwestern.edu
Office hours: Mon 2:30PM in KGH 3411

Discussion sections: (start in week 2 of the quarter)

Mon 4:00PM-4:50PM in Tech. Inst. A110 (Shuyan)
Mon 5:00PM-5:50PM in Tech. Inst. L150 (Tom)
Wed 4:00PM-4:50PM in Tech. Inst. M152 (Felipe)
Wed 5:00PM-5:50PM in Tech. Inst. L150 (Tom)

Exams:
Oct 11 (Tue): Midterm I
Nov 8 (Tue): Midterm II
Dec 6 (Tue): Final exam

Course Description

This course introduces the major topics of microeconomics that are a continuation of material covered in ECON 310-1. The course provides students with analytical tools to understand economic phenomena and develops foundations for analyzing market settings with strategic players and incomplete information.

The course consists of three blocks. First, we cover basic social choice theory and apply it to the study of competitive markets. We show in what sense and under what assumptions markets lead to desirable social outcomes. Second, we delve into the analysis of strategic behavior and incomplete information by studying the theory of games and decision making under uncertainty. In the final block, we return to the question of how well markets work, but this time equipped with tools that allow us to take a more nuanced perspective. We will talk about auctions, adverse selection, and inequality.

Course goals. This course discusses a mixture of abstract and practical concepts. Correspondingly, the main goal is to teach you how to apply these abstract concepts to better understand economic reality. After taking this course, you should be well equipped to analyze simple microeconomic systems using mathematical modeling and basic economic concepts such as efficiency and equilibrium. Most importantly, this course aspires to teach you how to think like an economist, by appreciating the role of preferences, information, and incentives in the analysis of human behavior.

Prerequisites. The economics requirement for this course is Econ 310-1. We will heavily rely on the ideas and 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 a good reference when you want to remind yourself of these techniques. The mathematics requirement for this course is single-variable calculus.

Textbooks. No textbook is assigned for this class. For background reading, one of the following texts is recommended:

- D. Besanko and R. Braeutigam, Microeconomics (Wiley, 6th edition, 2020)
- H. Varian, Intermediate Microeconomics: A Modern Approach (Norton, 9th edition, 2014)
- B. Stevenson and J. Wolfers, Principles of Microeconomics, (Macmillan Learning, 2020)

Discussion sections. Teaching Assistants will hold discussion sections every week. The discussion sections will elaborate and discuss the material from the lecture, primarily through solving problems (similar to the ones that are assigned as homework). TAs will also run weekly office hours.

Requirements and grading. Grades will be based on:

- Problem sets 10%
- Midterm exam I 25%
- Midterm exam II 25%
- Final exam 40%

Moreover, if your final exam score is higher than the score from one of the midterms, we will increase the weight on the final exam to 65% and decrease the weight on the lowest score from a midterm to 0%. Effectively, if you don't do well on a midterm, you have a chance to make up for it on the final exam.

There will be no make-up exams. Because of the above re-weighting rules, you are allowed to miss one midterm exam without providing a reason, and in this case the weight on your final exam will be increased to 65%. 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 or place. In the unlikely case that you cannot take the final exam at the regular time and place, we will assign an incomplete grade.

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, your 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 exams are returned. Adjustments in partial credit are typically not made, and if an adjustment is made, the exam may be referred to an independent grader, who will review either the question or the entire exam, and assign a replacement grade that may be higher or lower than the original.

Problem sets. Weekly problem sets will be assigned. Generally, problem sets will be posted on Thursdays, and will be due on **Friday at midnight** of the following week. Late submissions will not be graded. You can download the problem sets from Canvas, and you will have to upload your solutions to Crowdmark. When computing the average problem set score to enter your grade, your lowest individual score will be dropped. This allows you to miss a problem set, if necessary, without adverse consequences.

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

Week 1: Social choice	
Week 2: General equilibrium	
Week 3: General equilibrium	BLOCK 1
Week 4: Uncertainty and risk	(Midterm on Oct 11)
Week 5: Game theory	
Week 6: Game theory	
Week 7: Auctions	BLOCK 2
Week 8: Mechanism Design	(Midterm on Nov 11)
Week 9: Mechanism Design	
Week 10: Inequality and Market Design	BLOCK 3
	(Final exam on Dec 6)

AccessibleNU. Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (mailto:accessiblenu@northwestern.edu) and provide us with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

Laptop and Mobile Communications Policy. Except in the case of proven medical necessity, as a general rule, students may not use a laptop computer during the lectures. Such devices must remain in your bag and may not be placed on your desk. However, you may use a tablet (or equivalent device) for taking notes under two conditions: (1) the device lies flat on the desk, so that the student behind you cannot see your screen (and is not distracted by it), and (2) you sit in one of the front rows. Any use of the tablet for purposes other than taking notes is not allowed. Mobile devices should have the ringer turned off and be placed in pockets or backpacks. Students may not make or receive phone calls, surf the web, or send or receive text messages during class.

In-person versus remote teaching. Lectures, discussion sections, and exams take place in-person. In the event that we will be forced to move to remote teaching, the syllabus will be updated to accord with university guidelines and recommendations.

NUHelp. Students can find useful resources for safety and security, academic support, and mental and physical health and well-being at the NUhelp website and app.

Quarter-Long Study Group Opportunity – Registration Required. If you would like to study with other students in this class, consider joining a Peer-Guided Study Group. Participants will meet weekly with about 5 to 8 other students and a peer facilitator, a student who has already taken and done well in the course. During sessions, students review concepts, work through practice problems, bring their questions, and work together to develop answers.

Students register for the full quarter on CAESAR and attendance is expected weekly. Study Group sessions are listed on CAESAR below course lecture and discussion sections (ex. CHEM 151-SG – CHEM 151-SG Peer-Guided Study Group: Quantitative Problem Solving in Chemistry). Feel free to contact Borislava at *pgsg@northwestern.edu* with any questions. Provided through Academic Support & Learning Advancement.

Drop-In Peer Tutoring – No Appointment Needed. Students are welcome to stop by Drop-In Peer Tutoring to get support with a specific question or issue, or just talk through course materials with others. Covers this course and many introductory courses in Biology, Chemistry, Economics, Engineering, Math, Physics and Stats. Tutoring takes place Sundays through Thursdays. **Check specific times, courses and locations on the Drop-In Peer Tutoring website.** Feel free to contact Valerie at *valerie.wolf@northwestern.edu* with any questions. Provided through Academic Support & Learning Advancement.