Economics 310-2: Intermediate Microeconomics II

Northwestern University, Winter 2020 Time: 2:00-3:20 Tuesday/Thursday Location: Tech Lecture Room 3

> Yingni Guo Office: Global Hub 3227

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: general equilibrium in perfectly competitive markets, elementary game theory, oligopoly (Cournot, Bertrand and Stackelberg models), the economic consequences of uncertainty and asymmetric information, and social choice theory.

Prerequisite: The economics requirement for this course is Econ 310-1. One of the first things that we will do in class is 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 learn/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.

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

- Jeffrey M. Perloff, Microeconomics: Theory and Applications with Calculus (Pearson/Addison-Wesley, 3nd edition, 2013).
- Walter Nicholson and Christopher Snyder, Microeconomic Theory: Basic Principles and Extensions (Thomson/South-Western, 11th edition, 2011).

- Hal R. Varian, Intermediate Microeconomics: A Modern Approach (Norton, 9th edition, 2014).
- David Besanko and Ronald Braeutigam, Microeconomics (Wiley, 5th edition, 2013)

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

Discussion sections: Each week there will be review sessions by the teaching assistants. The review session will primarily discuss the past problem sets, and elaborate and discuss the material from the lectures. Discussion sections will meet weekly. Discussion sections are an especially useful opportunity to work through problems and seek answers to questions. TAs will also run weekly office hours.

Teaching assistants	Discussion section time	Section location
Edmund Lou	Mon 3:00PM - 3:50PM	Tech $L150$
Edmund Lou	Wed 3:00 PM - 3:50 PM	Tech L150
Guillaume Gex	Mon 4:00PM - 4:50PM	Tech $M177$
Guillaume Gex	Wed 4:00 PM - 4:50 PM	Tech L150

Teaching assistants	Office hour	Office hour location
Edmund Lou	Mon/Tue 6-7pm	Global Hub 3198
Guillaume Gex	Tue/Wed 5-6pm	Global Hub 3198
Yingni Guo	Tue 3:30-5:30pm	Global Hub 3227

Requirements: Grades will be based on:

- 10%: Problem sets
- 25%: Midterm exam I: Thursday, January 30 (in class)
- 25%: Midterm exam II: Thursday, February 20 (in class)
- 40%: Final exam: Thursday, March 19, 12:00-2:00 pm

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 a midterm exam for a legitimate, approved and documented reason (e.g., illness or emergency) and 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 30% Midterm Exam, 60% Final Exam, and 10% Problem Sets). A zero exam score will be assigned if you miss either midterm exam for an unexcused reason. You must take at

least one midterm exam to pass the course. 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/place. In the unlikely case that you cannot take the final exam at the regular time and place, 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 in the next 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, 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. In the rare cases that multiple questions are raised about a single exam, the review will proceed beyond the first question only if an adjustment is made on that question. 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: 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. Late problem sets will not be accepted. In particular, problem sets must be received *in class by the end of lecture* on the day the problem set is due. Problem sets will be handed back in that week's discussion section. 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: General equilibrium
- Week 2: General equilibrium (Problem set 1, due Thursday)
- Week 3: Game theory (Problem set 2, due Thursday)
- Week 4: Game theory (Problem set 3, due Thursday; Midterm I on Thursday)
- Week 5: Game theory/Uncertainty (Problem set 4, due Thursday)
- Week 6: Uncertainty/Asymmetric information (Problem set 5, due Thursday)
- Week 7: Asymmetric information (Problem set 6, due Thursday; Midterm II on Thursday)
- Week 8: Asymmetric information/Social choice (Problem set 7, due Thursday)
- Week 9: Social choice (Problem set 8, due Thursday)
- Week 10: Social choice (Problem set 9, due Thursday)
- Week 12: Final exam (Thursday, March 19, 12:00-2:00 pm)