

MICROECONOMIC THEORY

Econ 310-1
Spring 2022

Prof. Alessandro Pavan
Northwestern University
Economics Department

COURSE INFORMATION

This course is concerned with the analysis of consumer and producer behavior in market economies. It is the foundation for all the 300-level courses offered by the Economics Department. It introduces students to key concepts and analytical techniques in modern microeconomic theory. The first part of the course examines the demand side of the market: consumers' preferences, individual and market demand. The second part examines the supply side: cost functions, output decisions, and technology adoption. The last part examines welfare and government intervention in perfectly competitive markets. Equilibrium in oligopolistic markets is discussed in the follow-up course Economics 310-2.

PREREQUISITES: Students should have completed (or at least be familiar with) the material covered in Economics 201 and 202 (Introduction to Micro and Macro Economics), and Mathematics 214-1 (Differential Calculus). Calculus is used in the course.

TEACHING METHOD: Two lectures a week + discussion sessions. The discussion sessions are an integral part of the course. They are used to expand on ideas presented in class and discuss problems sets and examinations. Every student enrolled in the course is supposed to participate.

EVALUATION METHOD: One midterm (counting 40%) and a final exam (counting 40%). Homework problem sets count 20%.

READING: The manual is *Microeconomics*, 2nd edition, by Bernheim and Whinston (McGraw-Hill).

ADDITIONAL INFORMATION

CLASSES AND ONLINE MATERIAL: Covid-permitting, all classes will be "in person." In case we need to have a few classes online, we will use the platform ZOOM.

All practical information about the course will be posted on CANVAS. Please be sure you read the material and familiarize with the relevant information before classes start.

We will use CANVAS for all assignments and file postings.

If possible, we ask that you upload a picture of yourself on your CANVAS profile. This will make it easier for us and other students to recognize you.

EXAMINATIONS: The midterm exam will take place Monday, April 25, 2022. The final exam will take place Wednesday May 25, 2022.

Because many students have internships that start the week of June 6, our class will end with an exam from 8:30 AM to 9:50 AM on Wednesday, May 25. *There will be no exam during Finals Week*.

No make-ups for the exams will be given. There are only three circumstances in which a student will be excused from taking the midterm:

- 1) An absence due to illness, which requires a letter from a doctor;
- 2) An absence due to the travel schedule of a student's athletic team, which requires a letter from the athletics department;
- 3) an absence due to family emergency, which requires appropriate documentation, the form of which will be determined based on the circumstances.

In the case of an excused absence for reasons (1) and (3), and if no proctored sitting of the exam while traveling is possible in case (2), the final grade will be determined by proportionately increasing the weights given to the problem sets and the final. If an absence from a midterm is unexcused, a score of zero will be entered for that exam. Missing the final will result in an incomplete grade.

The midterm will cover the material in chapters 3-6 + 10 in the manual. The final exam will cover material in Chapters 7-9 and 14-15.

TENTATIVE SCHEDULE: A tentative weekly plan can be found at the end of this document. Please note that the syllabus and course webpage can vary at any time during the quarter. Students are thus encouraged to check the Canvas web page regularly.

PROBLEM SETS: Each PS will be posted on Wednesday afternoon (starting from the first week of the quarter) in the Canvas website for 310-1 in the "Assignments" folder. It is due the following Monday by 4:00 PM. Problem sets returned late receive zero credit.

PS will be graded weekly and discussed in the TA sessions. The solutions will be posted in the "Assignments" folder on Monday evening, after 8.00 PM.

Students can work in groups (of up to 3 students). We ask that each student turns in the assignments individually.

COPYRIGHT: Northwestern University owns a copyright on all class material, including the lectures. Posting online class material (e.g., problem sets; textbook chapters, exams, etc.) is forbidden. Student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#). Unauthorized use of classroom recordings — including distributing or posting them — is also prohibited. Under the University's Copyright Policy, faculty own the copyright to instructional materials — including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

CLASSROOM ETIQUETTE: Due to the negative externalities involved, the following policies hold for in-person lectures: No reading of newspapers or chatting during class. Cell phones are to be put away (in pockets, purses, or bookbags) and have their ringers turned off for the entire class. In the event that an emergency requires you to take a call or answer a message, you are asked to quietly leave the room.

ADVICE ON STUDYING: Material later in the course builds on material taught earlier in the course. It is therefore vital that students keep up with the readings and problem sets, and ensure that they understand entirely the logic of the models and analytical techniques that are discussed in class. If a student is confused about any material, it is best that he/she speaks to the instructor and the teaching assistants immediately so that he/she can be helped. As this course makes use of analytical models, practice at solving problems is the best way to prepare for the exams. There are exercises at the end of each chapter in the textbook. Students are encouraged to solve them. Students can also practice with the problems in the various manuals for intermediate microeconomics available in the library and online.

TENTATIVE SCHEDULE

What follows is a tentative schedule for the quarter. Changes may be made depending on time constraints.

Week 1 (March 29): Introduction + Consumer preferences – BW 3+ 4

Week 2 (April 4): Budget constraints + consumer choice – BW 4 + 5

Week 3 (April 11): Demand and welfare – BW 5 + 6

Week 4 (April 18): CPI bias + Intertemporal choices + Labor supply – BW 6 +10

Week 5 (April 25): Midterm#1 + technology – BW 7

Week 6 (May 2): Cost minimization – BW 8

Week 7 (May 9): Profit maximization in competitive markets – BW 9 +14

Week 8 (May 16): Welfare + government interventions – BW 2 + 15

Week 9 (May 23): Revision + Final exam

ACADEMIC INTEGRITY

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit: <https://www.northwestern.edu/provost/policies/academic-integrity/index.html>

ACCESSIBILITY

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: accessiblenu@northwestern.edu; p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

COVID-19 CLASSROOM EXPECTATIONS

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the [COVID-19 Code of Conduct](#). With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

COVID-19 TESTING COMPLIANCE

If a student fails to comply with the [COVID-19 Code of Conduct](#) or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week.

Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

CLASS MODALITY

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

Maintaining the health of the community remains our priority. If you are experiencing any symptoms of COVID do not attend class and update your Symptom Tracker application right away to connect with Northwestern's Case Management Team for guidance on next steps. Also contact the instructor as soon as possible to arrange to complete coursework.

Students who experience a personal emergency should contact the instructor as soon as possible to arrange to complete coursework.

Should public health recommendations prevent in person class from being held on a given day, the instructor or the university will notify students.

CLASS RECORDING

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#). Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's [Copyright Policy](#), faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

WELLNESS AND MENTAL HEALTH

Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and

Education (CARE). Additional information on all of the resources mentioned above can be found here:

<https://www.northwestern.edu/counseling/>

<https://www.northwestern.edu/religious-life/>

<https://www.northwestern.edu/care/>