ECON 8200 SEMINAR IN MICRO ECON THEORY – Spring 2023

Instructor: Eduardo Cenci

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Office Hours: By appointment (calendly.com/educenci/office-hours-spring-2023)

Tuesday/Thursday, 2:00 – 4:00 pm, Mammel Hall 332G or Zoom

Lectures: Monday, 6:00 – 8:40 pm, Mammel Hall 358

Prerequisites: ECON 3200, ECON 3220 and ECON 8306 or permission

Credit Hours: 3 (approximately 3 hours of lecture + 6 hours of out-of-class work each week)

Course Description

This course will introduce you to the main topics in microeconomic theory. We will start by discussing why economists use microeconomic models to study how individuals, firms, and governments make choices and the consequences of these choices on the economy. We will then proceed to study of the following major topics:

1. Theory of Choice and Demand
2. Theory of Production and Supply
3. Choice under Uncertainty
4. Strategic Choices (Game Theory)
5. Equilibrium and Welfare in Competitive and Non-competitive Markets
6. Information Asymmetry

We will study each topic using mathematical, graphical, and logical tools; we will add a degree of formality higher than an undergraduate intermediate-level course to the treatment of each topic.

At the end of this course, you will be familiar with the way economists use economic models, having studied the building blocks of microeconomic theory with a more scientific and formal treatment than before. You will be better equipped to read primary sources of economic literature, such as applied theory papers. Finally, you will be better prepared to continue your studies in economics and take advanced courses in microeconomic theory and applications. I hope you enjoy it!

Learning Outcomes

See appendix B.

Canvas Webpage

All course content, assignments, and announcements will be posted on the course Canvas page at unomaha.instructure.com/courses/65365.

Required Materials (Textbook)

All required readings are from:

- Nicholson & Snyder, Microeconomic Theory: Basic Principles and Extensions, 12th Ed. Publisher: Cengage, 2017.

As an alternative, **you can use the 11th Ed**.

Class Structure

The class will meet on Mondays for 150 minutes (with a 10-minute break in the middle), from 6:00 pm to 8:40 pm in Mammel Hall, Room 358. Classes will be a mix of lecture, activities, and group discussions. Students are expected to **read the assigned chapter(s) before each class**. Unless stated otherwise, I will not record lectures and share recordings. Students are expected to attend classes in person. If you miss a class for any reason, catch up on the missed content on Canvas, with your colleagues, or with me during office hours.

Course Structure

The course is organized in 17 weeks (see the course calendar at the end). In weeks 1, 8, 9, 16, and 17 we will have introductions, reviews, exams, and holidays. In the remaining 12 weeks, we will have content and activities. For **each of these 12 content weeks**, you will:

- write a **reflection** on the week's readings, and
- answer a **problem set** on the week's content.

You must submit your reflections on Canvas by Sunday 11:59 pm each week, and problem sets before the beginning of the next week (on the following Monday, in class). See the course calendar for the exact due dates. Your reflections and problem sets will be graded and count towards 12% and 42% of your final grade, respectively (I will **drop the two lowest grades** in each assignment). The remaining 46% of your final grade will come from two exams and participation.

Grade Breakdown

Reflections:	120 points
Problem Sets:	420 points
Midterm Exam:	160 points
Final Exam:	240 points
Participation:	60 points
Total:	1,000 points

Assignments in Detail

Reflections: Students will submit a two-paragraph reflection at the beginning of each content week. These reflections will refer to the week's readings and respond to the following questions: (1) What are your main takeaways from the readings? (2) What points, concepts, or applications in the readings remains unclear to you? Reflections must be submitted as posts on Canvas discussion forums (follow the detailed instructions on them). Grading will focus on effort and completion. We will have 12 reflections throughout the semester, each worth 12 points. Your two lowest grades will be dropped. Thus, you can earn at most 10 x 12 = 120 points.

Problem Sets: Each problem set will have approximately five problems/questions on the week's content. They may also contain (optional) practice problems at the end, some of which we can solve together and discuss in class. Please turn in your answers at the beginning of each class or drop them in my mailbox (located in the copy room of suite 332 in Mammel Hall). Be organized: add your name, staple all sheets, identify each problem/item, etc. You may consider typing your answers, including the math—especially if you intend to pursue an academic career in economics. We will have 12 quizzes throughout the semester, each worth 42 points. As with the reflections, your two lowest grades will be dropped. Thus, you can earn at most 10 x 42 = 420 points.

Exams: The midterm exam will be worth 160 points (16% of your final grade). It will take place on Monday, Mar 20, 7:00–8:30 pm, in the same room and time of our regular class and will cover all content seen until that date. The final exam is worth 240 points (24% of your final grade). It will take place on Monday, May 15, 7:30–9:30 pm, following UNO's official exam calendar. The final exam will cover all content seen in the course, with emphasis on the second half. Both exams will be preceded by review sections in class (see the course calendar for the exact dates).

Participation: Your participation grade will be based on attendance, participation in non-graded course activities, and your general engagement. It is worth 60 points (6% of your final grade). I will assess your overall participation at the end of the semester, reward your evolution, and consider your place in the grade distribution when assigning you a final participation grade.

Letter grade cutoffs
I will use the cutoffs below to assign you a final letter grade.

930–1,000	A	|	730–769	C
900–929	A-	|	700–729	C-
870–899	B+	|	670–699	D+
830–869	B	|	630–669	D
800–829	B-	|	600–629	D-
770–799	C+	|	0–599 F	

The A and A+ grades give you the same number of GPA points. I will reserve the A+ for students whose performance in the course really exceeds expectations.

(No) Extensions or Late Submissions

There are virtually no extensions, no late submissions, and no ways to make up for a missed assignment in this course. For both the reflections and quizzes, you already have two "freebies:" you can drop 2 out of 12 grades. That means you can miss two weeks of course activities due to extenuating circumstances and still get a full grade without an extension or makeup. Please don't ask for an extension unless you have already used your two "freebies" **due to justified reasons**.

Discussion Forums

I encourage you to use the Discussion Forums on Canvas to ask questions about the week's readings, lectures, and quizzes. When you ask a question in a forum, everyone can follow and benefit from the discussion (by email, it is just you and I). In other words, asking questions in the discussion forums generates positive externalities.

Communication

I will reply to emails within 24 hours (except during weekends). The same goes for messages and posts on Canvas forums. If I do not reply to your email/post after 24 hours, please send me a reminder. Feel free to ask questions before or after class, but keep in mind that some matters require time and are better suited for office hours. Use email for short inquiries and office hours for longer ones. If you communicate something to me verbally, please follow up with an email so that we both have a record of that communication. Such emails are useful reminders for when I am expected to follow up on a request or question from you.

Course Feedback

Just as I evaluate you, you will have opportunities to evaluate me. In addition to the university course evaluations, I will ask for your input halfway through the semester so that I can have feedback when there is still time to act on it. Though not mandatory, answering these surveys is highly encouraged. I value your honest thoughts and suggestions on how to improve the course.

Statement on Diversity

I understand that each one of you comes to class with unique backgrounds, strengths, and challenges. I will do my best to create space for this diversity in our course and use it in our favor—and I count on your help to do so. Our diversity makes our class richer. You belong to this class, and you belong to economics. Our course is better because you are in it, and economics will be better off with you in it.

Preferred Name and Preferred Gender Pronouns
Class rosters are provided to the instructor with the student's legal name. I will gladly address you by an alternate name or gender pronoun if you wish. Please advise me of this preference early in the semester so that I can change my records accordingly. My pronouns are he/him/his.

Accessibility Accommodations
It is my goal that this class will be an accessible and welcoming experience for all students. Reasonable accommodations are provided for students who are registered with Accessibility Services Center (ASC) and make their requests sufficiently in advance. For more information, contact ASC (Location: 104 H&K, Phone: 402.554.2872, Email: unoaccessibility@unomaha.edu). Or visit: www.unomaha.edu/student-life/accessibility/index.php.

Students with Children
I am willing to make accommodations for students with parenting responsibilities. If that's your case and you expect to need such accommodations, please let me know early in the semester.

Academic Integrity Policy
The maintenance of academic honesty and integrity is a vital concern of the University community. All students are required to adhere to the highest standards of academic integrity and behavior and must satisfy the UNO Academic Integrity Policy (www.unomaha.edu/campus-policies/academic-integrity.php) and the Student Code of Conduct (www.unomaha.edu/student-life/student-conduct-and-community-standards/policies/code-of-conduct.php).
It is the student's responsibility to read, understand and abide by these policies.

Video Recordings
Course lectures may be audio/video recorded, and the recordings may be available to students registered for this class. This is intended to supplement the classroom experience. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact me during the first week of class to discuss alternative arrangements. Notice that the **students may not make audio or video recordings** of, or live stream, any classroom activity, including lectures, without express prior written consent from the course instructor or if a student has an approved accommodation that requires recording. For more details on this, visit: www.unomaha.edu/campus-policies/recording-of-classroom-activities.php.

Appendix A: Resources for Students

CBA Tutoring Labs: The College of Business Administration offers free tutoring services for students. This includes tutoring in Economics, Finance, and Math. Schedule an appointment at: www.unomaha.edu/college-of-business-administration/academics/tutoring.php.

Math Science Learning Center (MSLC): The Math-Science Learning Center offers peer assisted, independent study in the form of peer tutoring, facilitated study groups and supplemental instruction. The MSLC is here to help all UNO students studying math and science free of charge. Students wishing to work with a peer-tutor simply need to drop in - no appointment is necessary for most courses. Students interested in joining a facilitated study group can sign up simply by visiting the MSLC website: www.unomaha.edu/MSLC.

Speech Center: The UNO Speech Center provides free consulting and coaching services to all UNO students, faculty, and staff in preparing oral presentations. The Speech Center Consulting Room can help you with presentation preparation, outlining, effective delivery techniques, along with any other presentational needs. Speech consulting will help at any stage in the speech-making process, whether you are just starting to develop topic ideas or nearly finished with preparing a presentation. For more information about their services or to schedule an appointment, go to www.unomaha.edu/speechcenter.

Writing Center: The UNO Writing Center offers free one-on-one consultations with trained consultants to all students, faculty, and staff. Their goal is to help writers improve their writing skills and confidence in all types of writing, in all subject areas, and at all stages of the writing process. For more information about their hours and locations or to schedule an appointment, go to www.unomaha.edu/writingcenter.

Criss Library: UNO's Criss Library offers a wide variety of resources that support student learning. Subject specialist librarians have in-depth knowledge of researching within specific disciplines and can give you guidance specifically for your area of study. Students are encouraged to explore customized resources featured on their website: www.unomaha.edu/criss-library.

Appendix B: Student Learning Outcomes

The student learning outcomes (SLOs) for this course are divided into five groups: Consumer Theory, Theory of the Firm, Partial Equilibrium Analysis, Market Power, and Information and Game Theory. At the end of this course, the students will…

SLO Group 1: Consumer Theory

1.1. Critically evaluate the axioms of rational choice

1.2. Apply utility-maximization techniques to find the consumer's optimal demands and the indirect utility

1.3. Apply expenditure-minimization techniques to find the consumer's compensated demands and expenditure function

1.4. Relate the compensated and uncompensated demands and the indirect utility and expenditure functions

1.5. Use the consumer's optimal demands to estimate the individual demands and elasticities and illustrate the income and substitution effects

SLO Group 2: Theory of the Firm

2.1. Differentiate between total, average, and marginal product or cost

2.2. Devise a relationship between production technologies and the corresponding cost functions

2.3. Apply profit-maximization techniques to find the production decisions of a competitive firm

2.4. Apply cost-minimization techniques to find the firm's optimal input demands and elasticity of substitution

2.5. Identify the main properties of a firm's cost function and contingent input demands

Group 3: Partial Equilibrium Analysis

3.1. Critically evaluate the assumptions of the perfect competition model

3.2. Combine information on input prices and the production and cost functions of a representative firm to derive the short and long-run supply of a given industry

3.3. Illustrate the effects of tax policies using partial equilibrium analysis

Group 4: Market Power

4.1. Explain how average costs and institutional rules can create entry barriers

4.2. Describe how firms can benefit from colluding to form a cartel and the usual instability of such collusion

4.3. Calculate the profit-maximizing decisions of a monopolist and their welfare effects

4.4. Analyze oligopoly equilibria in which firms compete by choosing quantities or prices

4.5. Calculate the effects of different pricing strategies on the consumer and producer surpluses

<u>Group 5: Information and Game Theory</u>

5.1. Illustrate the solutions for different types of games with two or more players

5.2. Contrast hidden-action and hidden-type asymmetric information problems

5.3. Contrast first and second-best contracts in asymmetric information problems

5.4. Analyze Agent-Principal problems identifying the relevant constraints and calculating solutions under full and asymmetric information

Appendix C: Course Calendar

The schedule below is **tentative** and may be altered as needed. In particular, the content covered in each lecture might be shortened or moved. Exam and due dates are unlikely to change.

Week	**1**	**-**	**Introduction**
		Mon	23-Jan	Introduction, Syllabus, and Ch. 1

Week	**2**	**-**	**Preferences and Utility Maximization**
		Sun	29-Jan	Due: Reflection 1 (Ch. 3 & 4.1-3)
		Mon	30-Jan	Lecture Ch. 3 & 4.1-3

Week	**3**	**-**	**Utility Maximization and Income and Substitution Effects**
		Sun	5-Feb	Due: Reflection 2 (Ch. 4.4-7 & 5.1-6)
		Mon	6-Feb	Lecture Ch. 4.4-7 & 5.1-6; Due: Problem Set 1

Week	**4**	**-**	**Income and Substitution Effects and Demand Relationships**
		Sun	12-Feb	Due: Reflection 3 (Ch. 5.7-9 & 6.1-4)
		Mon	13-Feb	Lecture Ch. 5.7-9 & 6.1-4; Due: Problem Set 2

Week	**5**	**-**	**Uncertainty**
		Sun	19-Feb	Due: Reflection 4 (Ch. 7)
		Mon	20-Feb	Lecture Ch. 7; Due: Problem Set 3

Week	**6**	**-**	**Production and Costs Functions**
		Sun	26-Feb	Due: Reflection 5 (Ch. 9 & 10.1-3)
		Mon	27-Feb	Lecture Ch. 9 & 10.1-3; Due: Problem Set 4

Week	**7**	**-**	**Cost Functions and Profit Maximization**
		Sun	5-Mar	Due: Reflection 6 (Ch. 10.4-6 & 11)
		Mon	6-Mar	Lecture Ch. 10.4-6 & 11; Due: Problem Set 5

Week	**8**	**-**	**Spring Break**
		Mon	13-Mar	Spring Break; Due: Problem Set 6 (use mailbox or email to submit)

Week	**9**	**-**	**Review and Midterm Exam**
		Mon	20-Mar	Review (6:00–6:50 pm) and Midterm Exam (7:00–8:30 pm)

Week	**10**	**-**	**Game Theory and Games with Complete Information**	
		Sun	26-Mar	Due: Reflection 7 (Ch. 8.1-8)
		Mon	27-Mar	Lecture Ch. 8.1-8

Week	**11**	**-**	**The Partial Equilibrium Competitive Model**	
		Sun	2-Apr	Due: Reflection 8 (Ch. 12)
		Mon	3-Apr	Lecture Ch. 12; Due: Problem Set 7

Week	**12**	**-**	**Monopoly**	
		Sun	9-Apr	Due: Reflection 9 (Ch. 14)
		Mon	10-Apr	Lecture Ch. 14; Due: Problem Set 8

Week	**13**	**-**	**Imperfect Competition**	
		Sun	16-Apr	Due: Reflection 10 (Ch. 15)
		Mon	17-Apr	Lecture Ch. 15; Due: Problem Set 9

Week	**14**	**-**	**Games with Incomplete Information and Asymmetric Information**	
		Sun	23-Apr	Due: Reflection 11 (Ch. 8.9-11 & 18.1-3)
		Mon	24-Apr	Lecture Ch. 8.9-11 & 18.1-3; Due: Problem Set 10

Week	**15**	**-**	**Asymmetric Information: Applications**	
		Sun	30-Apr	Due: Reflection 12 (Ch. 18.4-9)
		Mon	1-May	Lecture Ch. 18.4-9; Due: Problem Set 11

Week	**16**	**-**	**Review and Other Topics in Microeconomics**	
		Mon	8-May	Review and Other Topics; Due: Problem Set 12

Week	**17**	**-**	**Final Exam**	
		Mon	15-May	Final Exam (7:30–9:30 pm, MH 358)