

Microeconomic Theory ECO 7115

Instructor Info —

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Dr. Fatma B. Gunay

Office Hrs: T & Th 10am - 11am

MAT 313

fgunay@ufl.edu

Course Info ——

Prereq: ECO 7408 or equivalent M, W Period 7 - 8 1:55 pm - 3:50 pm

MAT 14

TA Info _____

Shangze Dai Office Hrs: TBA (MAT 301A)

shangzedai@ufl.edu

Overview

This doctoral-level course comprises the initial segment of a sequential exploration into the underpinnings of contemporary microeconomic theory. The first part of this course delves into decision theory, expounding upon the ramifications of rational decision-making within diverse contexts. Subsequently, the second part delves into the equilibrium interplay among rational decision makers, encompassing partial equilibrium theory and lotteries.

The course presupposes that students have completed an intermediate microeconomics course at the undergraduate level. Additionally, it anticipates a solid grasp of multivariable calculus, linear algebra, and fundamental real analysis on the part of the students.

Material

Required Texts

Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R. Green. *Microeconomic Theory*. Vol. 1. Oxford University Press, 1995

Supplemental Texts

Jehle, Geoffrey A, Reny, Philip J. Advanced Microeconomic Theory, 3rd edition

Varian, Hal R. Microeconomic Analysis, 3rd edition

Recommended Text for Math Review

Chiang, A.C., Wainwright, K., *Fundamental Methods of Mathematical Economics* . McGraw-Hill.

Abbott, S., Understanding Analysis, Springer-Verlag, 2001.

Lectures

ECO7115 Microeconomic Theory will be conducted in a face-to-face format and will take place on Monday, Wednesdays between 1:55pm and 3:50pm in room MAT014. It is important to note that in-person attendance is mandatory and fundamental to the learning experience.

Exam Policies

The course will include three $\underline{\text{in-class}}$ exams. These exams are scheduled for the following dates:

- September 30
- October 28
- December 4

It is important to note that the exams are not comprehensive; they will focus on the material covered since the previous exam.

Make-up exams will only be granted under exceptional circumstances, with approval from the instructor *prior to the exam date*. Valid reasons for requesting a make-up exam include substantiated academic conflicts, religious observances, or unfore-seen emergencies. Such cases will be reviewed on an individual basis.

Exam papers will be graded within a week following the examination date. The results will be promptly announced on the Canvas, allowing you to receive timely feedback on your performance.

Your diligence and commitment to your studies are essential for success in this course. If you have any inquiries or require further clarifications regarding the assessment process, please do not hesitate to contact the instructor.

Grading Scheme

75% Exams, 25% each

25% Homework Assignments

Homework Assignments

Throughout the duration of the course, you will be assigned weekly assignments to be completed over the weekend. These assignments will be made available every Thursday and are due for submission on the following Monday at 1:55pm, in class. It is imperative that you adhere to these due dates as outlined.

Over the course of the semester, you will complete a total of 12 assignments. At the conclusion of the term, the lowest grade among these assignments will be dropped, offering you the opportunity to alleviate any undue pressure resulting from potential setbacks.

It is highly advised that you engage in independent attempts at solving the problem sets. In the event of challenges, seeking assistance from fellow classmates, the teaching assistant, and your instructor is the recommended approach.

Accommodations for Students with Disabilities

If you have a disability and need accommodations please be sure to contact the Disability Resource Center right away so they can help you get the accommodations you require. If you will need to use any accommodations in this class, please talk with me early so you can have the best possible experience this semester. For more specific information visit https://disability.ufl.edu

Academic Integrity

The University of Florida maintains high standards for academic integrity in order to provide the students the best quality education. An online copy of the academic honor policy can be found at Student Honor Code. Students are expected to be familiar with the Code and to recognize that their work in the course is to be their own original work that truthfully represents the time and effort applied.

Maintaining the integrity of your academic work is of utmost importance in this course. It is imperative that you refrain from seeking external assistance, including the use of online tutoring websites. Please be aware that these platforms, which I will not name here, are known to collaborate with educational institutions by sharing user data.

I want to emphasize that you are expected to complete assignments and assessments independently, relying solely on your own understanding and efforts. If you encounter challenges or require clarification, I strongly encourage you to reach out to me for guidance. Upholding academic honesty not only reflects your commitment to your education but also contributes to a fair and equitable learning environment for all students.

I would like to remind you one more time that the Honor Pledge below applies to any course work you are assigned:

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied: On my honor, I have neither given nor received unauthorized aid in doing this assignment.

Generative Artificial Intelligence

The Department of Economics faculty assume that all work that is submitted for grading is written by the student whose name it bears, and that it represents their ideas and work. Accordingly, students are not permitted to use generative AI when completing assignments, quizzes, exams, or other graded work unless their instructor has expressly granted that permission. Unauthorized use of generative AI may constitute cheating and/or plagiarism. Such violations of the UF Student Honor Code will be reported to the UF Dean of Students Office and will be subject to severe sanctions.

Use of Course Materials

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Health Counseling and Emergencies

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center:

http://www.counseling.ufl.edu/cwc, and 352-392-1575.

Sexual Assault Recovery Services (SARS):

Student Health Care Center, 352-392-1161.

University Police Department:

352-392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Diversity and Inclusion

I would like to create a learning environment for my students that supports different perspectives, thoughts, experiences, and identities. To help me accomplish this, please let me know if you have a name / set of pronouns that differ from the official UF records. If you believe that your performance in the classroom is being affected by outside factors, do not hesitate to contact me in person, electronically or even anonymously.

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available online.

Class Schedule

PART 1	INDIVIDUAL DECISION MAKING		
WEEK1	Theory of Choice		Ch 1 (MWG), Ch 1 (JR), Ch 7 (Var)
		Preference Relations	
		Revealed Preference	
WEEK2	Ordinal Utility		Ch 1 (MWG), Ch 1 (JR), Ch 7 (Var)
		Utility Representations	
		Continuous Utility	
WEEK3	Consumer Choice		Ch 2 (MWG), Ch 1 (JR), Ch 8 (Var)
		Assumptions	
		MRS	
WEEK4-5-6	Classical Demand Theory		Ch 3 (MWG), Ch 1 (JR), Ch 9 (Var)
		Demand Functions	
		The Utility Maximization Problem	
		The Expenditure Minimization Problem	
		Lagrangian with Applications	
WEEK7	Envelope Theorems		Appendix ML (MWG)
		Applications and Extensions	
		Convex Versions	
WEEK8	Duality		Ch 3 (MWG), Ch 2 (JR)
		Indirect Utility	
		The Dual Problem	
		Hicksian Demand	
		Expenditure Function	
WEEK9	Aggregate Demand		Ch 4 (MWG), Ch 2 (JR)

Aggregate Wealth

Existence of a Representative Consumer

PART 2	CHOICE UNDER UNCERTAIN	ITY	
WEEK10	Uncertainty		Ch 6 (MWG), Ch 2 (JR), Ch 9 (Var)
		Lotteries	
		Expected Utility Theorem	
WEEK11	Risk and Risk Aversion		Ch 6 (MWG), Ch 2 (JR), Ch 9 (Var)
		First Order Stochastic Dominance	
		Risk Aversion	
		Arrow-Pratt Measures of Risk Aversion	
		Second Order Stochastic Dominance	
PART 3	PRODUCTION		
WEEK12-13 Production			Ch 5 (MWG), Ch 3 (JR), Ch 1-6 (Va
		Production Sets	
		Profit Maximization and Cost Minimization	
		Aggregation	
		Efficient Production	
PART 4	PARTIAL EQUILIBRIUM		
WEEK14-1	5 Competitive Markets		Ch 10 (MWG), Ch 4 (JR), Ch 13 (Va
		Pareto Optimality and Competitive Equil rium	ib-
		The Fundamental Welfare Theorems in a Pa tial Equilibrium Context	ar-
		Welfare analysis in Partial Equilibrium	
		Long-Run Competitive Equilibrium	