

# **ECON 5123**

## **MICROECONOMIC THEORY**

**Professor Georgia Kosmopoulou**

Fall 2023

This course provides an intensive treatment of modern microeconomic theory. Throughout, the course uses mathematical tools and analytic concepts. Its goal is to introduce first year graduate students to the basic models and theories that make up the extensive field of microeconomics. We study consumer theory, producer theory, market theory and special topics in economics of information and uncertainty.

### **Principal Texts:**

Hal R. Varian: *Microeconomic Analysis*, W. W. Norton, New York, 1992.  
Jehle and Reny: *Advanced Microeconomic Theory*, Second Edition, 2011.  
Simon and Blume: *Mathematics for Economists*, W. W. Norton, New York, 1994.

### **Other Useful Texts in Economics and Mathematics:**

Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green: *Microeconomic Theory*, Oxford University Press, New York, 1995.  
Sterling K. Berberian, *A First Course in Real Analysis*, Springer-Verlag, 1994.  
Richard Courant and Fritz John, *Introduction to Calculus and Analysis*, Springer-Verlag, 1989.  
Jack Hirshleifer: *Price theory and applications*, Prentice-Hall, 1980.

### **Grading Policy:**

**I. Exams:** There will be two midterm exams and a final exam. The first exam will count for 25% of your total grade, the second exam will count for 30% and the final will count for 40%. The tentative dates for the midterm exams are:

1<sup>st</sup> exam Thursday, October 5;  
2<sup>nd</sup> exam Thursday, November 2.

The final exam will be on Tuesday, December 12, 1:30-3:30pm.

**II. Problem Sets:** Problem sets will be given regularly. They will count for the remaining 5% of your final grade.

### **Office Hours:**

I will hold office hours Tuesday/Thursday 10:30-11:30. My office is at 306 Ellison Hall. A Zoom option will be available if you need it. A link will be provided via a calendar invitation during the first week of classes. For any questions please e-mail me at: [georgiak@ou.edu](mailto:georgiak@ou.edu).

## **Course outline:**

The following is a list of topics I wish to cover in class. It is unlikely that we will make it through all the topics listed. For exams, you will be responsible for material in topics actually covered in lecture.

### **I. Consumer Theory:**

*Topics to be discussed:* Preferences; Choice rules; Commodities; The budget set; Demand; The weak axiom of revealed preferences; Utility functions; Duality in demand theory; Utility maximization versus expenditure minimization; The strong axiom of revealed preferences; Aggregate demand.

### **II. Producer Theory**

*Topics to be discussed:* Production sets; Profit maximization versus cost minimization; Aggregation; Efficient production.

### **III. Market Theory**

*Topics to be discussed:* Competitive markets; Demand and supply; Market equilibrium; Oligopoly; Cournot competition; Bertrand competition; Product differentiation; Entry; The competitive limit.

### **IV. Special Topics**

*Topics to be discussed:* Private information and second-best solutions; Choice under uncertainty; Auctions and mechanism design, Externalities; Public Goods.

**Academic Integrity:** Students are responsible for being in compliance with OU's academic misconduct policies. Those policies are posted at <http://www.ou.edu/integrity/students>. Acts of plagiarism or other violations of the code can result in failure of the course.

**Copyright Statement:** Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class, or upload them to any other online environment.

**Religious Observance:** It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty.

**Reasonable Accommodation Policy:** Students requiring academic accommodation should contact the Accessibility and Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please visit <http://www.ou.edu/drc/home.html>. Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

**Adjustments for Pregnancy/Childbirth Related Issues:** Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see [www.ou.edu/content/eoo/faqs/pregnancy-faqs.html](http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html) for commonly asked questions.

**Title IX Resources:** For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24.7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24.7) to learn more or to report an incident.