

Economics 9451: Advanced Microeconomic Theory I

Fall 2025

Instructor: Dr. Xinghe Wang
E209 Lucas Street Building
wangx@missouri.edu

Class Time and Location:
Tu & Th 8am – 9:15am
E204A Lucas Street Building

Course Webpage: Canvas at <https://umsystem.instructure.com>

Course Description: This is the first PhD course in microeconomic theory. Microeconomic theory is a set of analytical tools designed to help us understand economic phenomena. It is based on the fundamental assumption that individuals pursue well-defined objectives, consider their knowledge of the environment, and—when in strategic situations—take into account their expectations about the behavior of others. Microeconomic models are abstract representations of collections of real-life situations and microeconomics uses mathematics to express its ideas formally. Topics of this course include consumer theory, producer theory, general equilibrium, and theory of choice under uncertainty. 3 credit hours. Graded on A-F basis only. Prerequisites: PhD standing.

Textbook:

Andreu Mas-Colell, Michael Winston, and Jerry Green, **Microeconomic Theory** (MWG)

Supplementary Materials:

Guoqiang Tian, **Lecture Notes: Microeconomic Theory** (GT)
<http://people.tamu.edu/~gtian/microeconomic%20theory-2018-01.pdf>

Other readings posted in Canvas

Grading: Grades for the course will be determined by class participation and homework assignments (10%), and two tests (45% each). Plus/minus grades will be used.

Exam Schedule: Test I after completion of Topics 1 & 2
Test II after completion of Topics 3 & 4

Missed Test Policy: You are expected to take all tests. But if you have an extraordinary circumstance that affects your ability to take a test, please contact the instructor at least two days in advance of the test date or as soon as possible.

Office Hours: 10:30am–11:30am Tuesdays and Thursdays or by appointment. You are welcome to email me requests for meetings at other times. Please specify in your email your available times and I will respond with a proposed meeting time based on your availability and mine.

Course Outline

1. Consumer Theory

- preferences
- consumer choice
- demand

Readings: Chapters 1-3 (MWG); Chapter 2 (GT)

Other readings:

Debreu, G. (1959) Theory of Value, Wiley.

Deaton, A. and J. Muellbauer (1980) Economics and Consumer Behavior, Cambridge University Press.

Stigler, J. (1950) "The development of utility theory," *Journal of Political Economy*, 373-396.

2. Producer Theory

- production set
- profit maximization
- cost minimization

Readings: Chapter 5 (MWG); Chapter 3 (GT)

Other readings:

Debreu, G. (1959) Theory of Value, Wiley.

Samuelson, P. (1947) Foundations of Economic Analysis, Harvard University Press.

Shepherd, W. (1970) Theory of Cost and Production Functions. Princeton University Press.

3. General Equilibrium

- pure exchange economy
- production economy
- Walrasian equilibrium

Readings: Chapters 15-17 (MWG); Chapters 7-8 (GT)

Other readings:

Arrow, K. and G. Debreu (1954) "Existence of equilibrium for a competitive economy," *Econometrica*, 265-290.

Debreu, G. (1959) Theory of Value, Wiley.

Arrow, K. and F. Hahn (1971) General Competitive Analysis, Elsevier Science Publishing.

4. Theory of Choice under Uncertainty

- expected utility theory
- risk aversion
- choice under uncertainty

Readings: Chapter 6 (MWG); Chapter 4 (GT)

Other readings:

Arrow, K. (1965) Aspects of the Theory of Risk-Bearing, Yrjo Jahnssonin.

Pratt, J. (1964) "Risk aversion in the small and in the large," *Econometrica*, 122-136.

Von Neumann, J. and O. Morgenstern (1944) Theory of Games and Economic Behavior, Princeton University Press.

ADMINISTRATIVE MATTERS

ACADEMIC INTEGRITY

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor or the [Office of Academic Integrity](#).

Students are expected to adhere to this honor pledge on all graded work whether or not they are explicitly asked in advance to do so: "I strive to uphold the University values of respect, responsibility, discovery, and excellence. On my honor, I pledge that I have neither given nor received unauthorized assistance on this work."

ACADEMIC INQUIRY, COURSE DISCUSSION, AND PRIVACY

When students record something that happens in a course (a lecture, class discussions, meetings, etc.) it has an impact on the rights of the people captured in that recording. For example, the instructor and the University may have rights to the intellectual property contained in that recording. At the same time, another student who may have been recorded has the right to privacy. In order to protect these rights, MU employs a policy (called "[Executive Order No. 38](#)") to govern both situations you may encounter while taking a course – when an instructor allows recordings and when they do not.

In this class, students may make audio or video recordings of course activity unless specifically prohibited by the faculty member. However, the redistribution of audio or video recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded.

Students who violate this policy are subject to discipline in accordance with provisions of [section 200.020](#) of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

FERPA

The [Family Educational Rights and Privacy Act](#) (FERPA) of 1974 is a federal law designed to protect the privacy of educational records; to establish the rights of students to inspect and review their education records; and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. The law applies to any individual who is or has been in attendance at an institution *and* regarding whom the institution maintains educational records. Once students have matriculated to the University of Missouri, i.e. enrolled in course work, FERPA rights transfer to the student, regardless of the student's age.

Students can enable certain individuals to have access to their education records by signing a [FERPA waiver](#). The consent must specify records to be disclosed, state the purpose of the disclosure and identify the party or class of parties to whom the disclosure must be made.

INTELLECTUAL PLURALISM

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may

contact the departmental chair or divisional director, the [Office of Academic Integrity](#), or the [MU Equity Office](#).

MENTAL HEALTH

The University of Missouri is committed to supporting student well-being through an integrated network of care, with a wide range of services to help students succeed. The MU Counseling Center offers professional mental health care and can help you find the best approach to treatment based on your needs. Call to make an appointment at 573-882-6601. Any student in crisis may call or go to the MU Counseling Center between 8:00-5:00 M-F. After hours phone support is available at 573-882-6601.

Visit our website at <https://wellbeing.missouri.edu/> to take an online mental health screening, find out about workshops and resources that can help you thrive, or learn how to support a friend.

NETIQUETTE

Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Our differences, some of which are outlined in the University's nondiscrimination statement, will add richness to this learning experience. Please consider that sarcasm and humor can be misconstrued in online interactions and generate unintended disruptions. Working as a community of learners, we can build a polite and respectful course ambiance.

RELIGIOUS HOLIDAYS & ACCOMMODATIONS

Many religious faiths are represented in the student body. The University of Missouri does not restrict student free exercise of religion, unless 1) the restriction is in the form of a rule of general applicability and does not discriminate against religion or among religions; and 2) it can be demonstrated that the application of the restriction is essential to furthering a compelling university interest and is not unduly restrictive considering the relevant circumstance. The policy of the University attempts to strike a reasonable balance between accommodating the religious practice of students and meeting academic needs and standards.

Consult IDE's [Guide to Religions](#) for the form that can be used to notify an instructor of an absence associated with religious practice. Students are expected to notify their instructor(s) by completing and submitting this form in a manner that is consistent with the procedure outlined in the university's policy on student religious accommodation. Providing false information regarding sincerely held religious practice is a violation of the university's Standard of Conduct and will not be tolerated.

NONDISCRIMINATION POLICY (PROHIBITED DISCRIMINATION)

The University of Missouri does not discriminate on the basis of race, color, national origin, ancestry, religion, sex* (including gender), pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, and any other status protected by applicable state or federal law. Discrimination includes any form of unequal treatment such as denial of opportunities, harassment, and violence. *Sex discrimination includes rape, sexual assault, sexual harassment, unwanted touching, stalking, dating/domestic violence, stalking, and sexual exploitation. Retaliation for making or supporting a report of discrimination or harassment is also prohibited.

If you experience discrimination or sexual violence, you are encouraged (but not required) to report the incident to the MU Office of Institutional Equity. Learn more about your rights and options at equity.missouri.edu or call 573-882-3880. You also may make an anonymous report online.

If you are a survivor, or someone concerned about a survivor, and need immediate information on what to do, see [RSVP Resources page](#). Both the [Office of Institutional Equity](#) and the [RSVP Center](#) can provide assistance to students who need help with academics, housing, or other issues.

In the event that you choose to write or speak about having experienced any of these forms of prohibited discrimination or harassment, Mizzou policies require that, as your instructor, I share this information with the MU Office of Institutional Equity. They will contact you to offer information about resources, as well as your rights and options as a member of our campus community.

STUDENTS WITH DISABILITIES

The goal of the University of Missouri is to ensure an inclusive learning environment for all students. [The University of Missouri Disability Center](#) provides services and accommodations for students to participate fully in the learning experience and to experience equitable evaluation of their performance. Students (including online students) with a documented disability can contact the Disability Center to establish an [Accommodation Plan](#). Documented disabilities include *hearing, vision, mobility, learning and attention, psychological health, and physical health*. Students' accommodations are implemented with the input of students to maximize the learning experiences. The MU Disability Center keeps information about a student's disability confidential.

Please notify me of your eligibility for accommodations as soon as possible. Additionally, if there are aspects of the course that present as barriers, such as inaccessible course content (e.g., learning assessments, PowerPoints, non-captioned videos, images, tables, PDFs) or if you need an immediate accommodation due to an injury, please contact me or the Disability Center as soon as possible.

STATEMENT FOR FACE-TO-FACE COURSES

This course is listed in the course catalog as a face-to-face course. The instructional activities planned for this course are designed for face-to-face interactions with your classmates and instructors. These activities often do not translate well over online video platforms. Because of this, it is up to instructor discretion whether asynchronous instruction or recordings of class activities are an appropriate substitute for regular classroom attendance. For specifics regarding excused absences or disabilities accommodations, please see the relevant section of this syllabus.

Use of AI in This Course

Learning to use AI responsibly and ethically is an important skill.

The use of generative AI tools **is permitted** in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Conducting a literature search; and
- Checking grammar and style. (Do not use for extensive rewriting!)

The use of generative AI tools **is not permitted** in this course for the following activities:

- Writing a draft or final version of a writing assignment.
- Writing entire sentences or paragraphs.

Except as provided above, all other uses are prohibited without the prior consent of the instructor.

AI Disclosure:

All uses of AI must be disclosed, and you may not submit any work generated by an AI program as your own. Failure to comply is a violation of academic integrity policies and will be subject to the sanctions below. Your disclosure statement should be located along with your references, and should be in a form similar to the following:

If you used AI:

“AI Disclosure Statement: During the preparation of this work, I used [e.g., ChatGPT] to [e.g., research XYZ laws]. After using this tool, I reviewed and edited the content as needed and I take full responsibility for the content of this paper.”

If you did not use AI:

“AI Statement: I did not use AI in researching or writing this paper.”

Apart from the required AI Disclosure, APA, MLA, and Chicago have guidelines for citing any AI-generated content. See, e.g.,

<https://apastyle.apa.org/blog/how-to-cite-chatgpt>

<https://style.mla.org/citing-generative-ai/>

<https://www.chicagomanualofstyle.org/qanda/data/faq/topics/Documentation/faq0422.html>

Fact-checking AI Output:

You should assume AI-generated output is wrong unless you cross-check it with reliable sources. You are responsible for fact-checking all AI output and you bear final responsibility for any errors or omissions. If you submit a paper containing fictional sources, fictional quotations, or other fictional content, your actions will be in violation of academic integrity policies and subject to the sanctions below.

Sanctions and Applicability:

- Sanctions for violation of these AI policies may include receiving a grade of F or 0 on the work submitted, as well as referral to the Academic Integrity Office.
- These AI policies apply to all written work submitted, including drafts.