

Economics 9452: Advanced Microeconomic Theory II

Spring 2020

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Office Hours: 1pm – 3pm Tuesdays, or by appointment

Class Time and Location: MW 8am – 9:15am Walter Williams 245

Course Webpage: Canvas at <https://courses.missouri.edu/>

Course Description: Microeconomic theory is a set of analytical tools designed to help us understand economic phenomena. The basic assumptions that underlie the theory are that individuals pursue well-defined objectives, take into account their knowledge of the environment and in strategic situations take into account their expectations of other individuals' behavior. Microeconomic models are abstract representations of collections of real-life situations and microeconomics uses mathematics to express its ideas formally. This course is a continuation of Economics 9451. Topics of this course include theory of choice under uncertainty, general equilibrium, game theory, imperfect competition, and theory of information.

Textbooks:

Andreu Mas-Colell, Michael Winston, and Jerry Green, **Microeconomic Theory** (MWG)
 David Mandy, **Producers, Consumers, and Partial Equilibrium** (Mandy)

Supplementary Materials:

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

Other readings to be posted in Canvas

Grading: Grades for the course will be determined by class participation and homework assignments (20%), and two tests (40% each). Plus/minus grades will be used.

Exam Schedule:	Test I	March 11 Wednesday
	Test II	May 14 Thursday 12:30pm – 2:30pm

Make-up Exams: Make-up exams will generally not be given. A request for alternative arrangements must be in writing and must be accompanied by appropriate documentation for not taking the scheduled exam.

Course Outline

1. 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.

2. General Equilibrium

- pure exchange economy
- Walrasian equilibrium
- first and second fundamental theorems of welfare economics

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.

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

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

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

3. Game Theory

- simultaneous games
- sequential games

Readings: Chapters 7-9 (MWG); Chapter 5 (GT)

Other readings:

Luce, R. and H. Raiffa (1957) Games & Decisions, New York: Wiley.

Myerson, R. (1999) "Nash equilibrium and the history of economic theory," *Journal of Economic Literature*, 1067-1082.

Nash, J. (1951) "Non-cooperative games," *Annals of Mathematics*, 289-295.

4. Oligopoly

-- oligopoly

Readings: Chapter 15 (Mandy); Chapter 12 (MWG)

Other readings:

Tirole, J. (1988) The Theory of Industrial Organization, MIT Press.

5. Information Economics

-- adverse selection

-- signaling

-- screening

-- principal-agent problem

Readings: Chapters 13-14 (MWG); Chapters 13-14 (GT)

Other readings:

Akerlof, G. (1970) "The market for lemons: quality uncertainty and the market mechanism," *Quarterly Journal of Economics*, 488-500.

Rothschild, M. and J. Stiglitz (1976) "Equilibrium in competitive insurance markets: an essay on the economics of imperfect information," *Quarterly Journal of Economics*, 629-649.

Spence, M. (1974) "Job market signalling," *Quarterly Journal of Economics*, 355-374.

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Academic honesty 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 academic dishonesty as an extremely serious matter, with serious consequences that range from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult the course instructor.

Academic Dishonesty includes but is not necessarily limited to the following:

- A. Cheating or knowingly assisting another student in committing an act of cheating or other academic dishonesty.
- B. Plagiarism which includes but is not necessarily limited to submitting examinations, themes, reports, drawings, laboratory notes, or other material as one's own work when such work has been prepared by another person or copied from another person.
- C. Unauthorized possession of examinations or reserve library materials, or laboratory materials or experiments, or any other similar actions.
- D. Unauthorized changing of grades or markings on an examination or in an instructor's grade book or such change of any grade report.

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Those students who are permitted to record are not permitted to redistribute audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded. Students found to have violated 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.

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TITLE IX

University of Missouri policies prohibit discrimination on the basis of race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, pregnancy, age, genetic information, disability and protected veteran status. Discrimination includes any form of unequal treatment such as denial of opportunities, harassment, and violence. Sex-based violence includes rape, sexual assault, unwanted touching, stalking, dating/interpersonal violence, and sexual exploitation.

If you experience discrimination, you are encouraged (but not required) to report the incident to the MU Office for Civil Rights & Title IX. Learn more about your rights and options at civilrights.missouri.edu or call 573-882-3880. You also may make an anonymous report online.

Students may also contact the Relationship & Sexual Violence Prevention (RSVP) Center, a confidential resource, for advocacy and other support related to rape or power-based personal violence at rsvp@missouri.edu or 573-882-6638, or go to rsvp.missouri.edu.

Both the [Office for Civil Rights & Title IX](#) and the [RSVP Center](#) can provide assistance to students who need help with academics, housing, or other issues.