ADVANCED MICRO ECONOMICS I

ECON 701
West Virginia University
Fall 2026
Reynolds Hall 4201
12:30- 14:10 M-W

Instructor:	Professor Roger D. Congleton	.
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Office Hours:	2:30 - 3:30 Tuesdays and Wednesdays, and Friday afternoon by appointment	.
Optional Texts:	Nicholson, W. ***Microeconomic Theory***, Twelfth Edition. (2016)	
	Knight, F. H. ***Risk Uncertainty and Profit***. (1985/1921) Midway Reprint edition, University of Chicago Press.	.
	Mas-Colell, A., Green, J. R., and Whinston, M. D. (1995) ***Microeconomic Theory***. Oxford: Oxford University Press	
.**Required Text**	Draft Textbook: *The Calculus of Commerce,* available below through lecture links.	
Course Description	Theory of consumer choice, utility theory, theory of the firm, theory of production, pricing in perfect and imperfect markets, risk and uncertainty, time, game theory and other topics are covered.	
Objective	The goal of the course is to provide graduate student with a thorough understanding of the core neoclassical models, their most relevant extensions, and implicit foundational assumptions. It also attempts to give them an appreciation of their explanatory power by analyzing linkages between economic, political, and social systems	
.**Course Organization:**	Advanced Microeconomics I is divided into three parts. The first part of the course focuses on the core models and results of economics. It reviews the theory of consumer behavior (demand), theory of firm output decisions (supply). the theory of firm production decisions and their connection to a firm's cost functions, and models of equilibrium prices.	.
	The second part explores extensions of the neoclassical model to choice settings where time and uncertainty are important features. It models inter-temporal choices and choices in settings where outcomes or circumstances are probabilistic rather than certain. It also develops models of innovation and entrepreneurship. Innovation is an example of decisionmaking under uncertainty and a source of uncertainty.	
	The third part explores implications of what might be called the framing institutions of markets. Many of these may be regarded as "market imperfections," but they are simply violations of some of the implicit assumptions about the setting in which trade takes place. Implications of theft, fraud, regulation, politics, and ethical dispositions are developed analytically. All these neglected factors can have significant effects on the manner in which markets operate and the extent of the networks of exchange, production, and innovation that typify contemporary markets. Part three concludes with an overview of welfare economics and its applications to markets, externalities, and system design.	Link to Undergraduate Math Econ Course
	The course is lecture and web-text based. This website provides links to most materials used in the course.	

Dates	Topics	Readings
	I. Market Equilibria and Comparative Statics	
19-Aug-26	1. Introduction to Course and Economic Models	
.	Methodological Individualism: What does rational choice mean to economists? .Rational Choice as a modeling device. Scarcity and optimization. Usefulness of models.	N: 1, 2, 3 MWG: 1, 2 Kn: 3
24-Aug-26	2. Consumer Demand	
.	The Geometry and Mathematics of Decisions to Purchase Goods and Services, Cobb-Douglas Models, More General Models of Consumer Choice [HW 1]	N: 11, 12 MWG: 5
2-Sept-26	3. Supply	
.	The Mathematics of Decisions to Produce Goods for Sale in the Short Run and Long Run by Price-Taking Firms, Some Implications of Diminishing Returns. Output decisions of Price- Making Firms. . [HW 2]	N: 5, 6, 7, 13 MWG: 3, 5 Kn: 6
9-Sept-26	4. Production	
.	Decisions about how goods are produced, and what they cost. Input Prices, technology, and production costs for price-taking firms. The demand for Inputs. Wages as a price. [HW 3]	N: 21, 22, 23; MWG: 3, 5 Kn: 4
16-Sept-26	5. Equilibrium Prices	
.	Market clearing prices in the short run. Marshallian and Ricardian Theories of Long Run Supply, Geometry and Calculus-Based Models of Market Prices, . [HW 4]	N:13, Kn:7
28-Sept-26	Review for Midterm Exam (Prerecorded overview of Part I)	Study Guide 1
30-Sept-26	**MIDTERM EXAMINATION (In Class, 5 pages of hand-written notes allowed.)**	
5-Oct-26	Midterm Exams Returned and Reviewed	Suggested Paper Ideas
	II. Risk, Uncertainty, and Markets	
7-Oct-26	6. Intertemporal Choice	
	Making plans that take more than 1 "period" to execute. Time preferences and discounting. Present and future values as common denominators for choices with future effects.	
12-Oct-26	7. Economic Implications of Risk	
	Risk aversion and choice under uncertainty. Maximizing expected utility. The demand for Insurance and other risk pooling and shifting strategies. Choices with uncertain outcomes. Illustrations: purchasing goods with random quality, quality control in production, output decisions with random prices. [HW 5]	N: 9, 10, 19 MWG: 13, 14
19-Oct-26	8. Ignorance and Entrepreneurship	
	Uninsurable Risks and the Usefulness of Reserves. Entrepreneurship as decisionmaking under uncertainty. Knight, Schumpeter, and Kirzner on Entrepreneurship. Entrepreneurs as Formateurs, Investing in Innovation, Innovation as a source of economic profits, Innovation as a source of uncertainty. [HW 6]	N:9, 10; MWG: 14 Kn: 9, 10 Baumol (1968) Holcombe (1998)
26-Oct-26	(13) Game Theory: Modelling Strategic Interactions	
	Games in Normal Form, Nash Equilibria, Social Dilemmas, Coordination Games, Games with infinite numbers of strategies, Mixed Strategies, Existence of a Nash equilibrium, Illustrations.	

	III. Social, Legal, and Political Underpinnings of Markets	
2-Nov-26	(a) 14. Law and Economics	
	The Economics of Crime the Extent of Markets, Fraud and the extent of Markets, the Quality of Law Enforcement, Realizable Gains to Trade, and the Extent of Markets	N: 26 MWG: 11, 12
2-Nov-26	(b) 15. Politics and Economics--Political Economy	
.	Electoral Competition and Electoral Determined Public Policy, Market Adjustments to Public Policies, Investments in Rent Seeking and the Extent of Markets. [HW 7]	N: 26, 27 MWG: 21, 22
9-Nov-26	(a) 16. Ethics, Norms, and the Efficiency of Markets	
	Culture and the Efficiency of Markets. Economizing on Ethical Agents. Culture and the Extent and Growth Rates of Markets. Extended Rational Choice Models.	N: 24 Kn: 5, 11
9-Nov-26	(b) 18. Welfare Economics	
	Deciding what is best, Utilitarian Notions of Economic Efficiency, Cost Benefit Analysis, the Pareto Criteria, Contractarianism. The normative properties of exchange (w and w/o externalities). [HW 8]	N: 9 MWG: 10, 15, 16
16-Nov-26	Review for End Term Exam	
18-Nov-26	**END-TERM EXAMINATION** **(In Class, 5 pages of hand-written notes allowed.)**	
21-Nov - 29-Nov	**FALL/Thanksgiving BREAK**	Ideas for Papers
30-Nov-26	(a) Exams returned and Reviewed	**Study Guide II**
30-Nov-26	(b) 19. Overview of the Course / Paper Work Shop	
9-Dec-26	**8-10 page own-work paper due at midnight on an applied micro topic (submitted via Email)**	**Ideas for Papers**
	Available for Zoom Meetings Re your papers during exam week	

.	**Grades:** Midterm Exam	35.00%
.	8-10 page Paper	25.00%
.	Endterm Exam	35.00%
	Homework	5.00%
.	Marginal extra credit for helpful class comments (up to 5% bonus)	