ECONOMICS 411 ADVANCED MICROECONOMIC THEORY OREGON STATE UNIVERSITY 4 CREDITS FALL 2020

Instructor: Michael Jerman

Contact Information: Zoom Office Hours:

Zoom PID: 297 626 2177 T,Th: 3:00PM-4:00PM (PST)

Email: michael.jerman@oregonstate.edu Or by appointment

Course Structure: Due to current pandemic restrictions, this course will be 100% online. The scheduled meeting time (MW 10:00AM–11:50AM) will be used for live-streamed lectures and participation exercises.

Technology Requirements: To access Canvas, the library, and communicate via email, you will need a way to access the web/apps on a phone, tablet, or computer using cell or internet access. To ask a question in office hours, you are welcome to connect via Zoom with any device, or call in with a landline phone (it can be helpful to screen share in Zoom, but is not necessary). Live-streamed lectures will utilize Zoom. The links to the Zoom lectures will be provided on Canvas. To participate in Zoom classes, you will benefit from a computer with a camera and microphone. You can also participate with a cell phone with the Zoom app, or even just with a landline phone.

Course Catalog Description: Rigorous treatment of optimizing behavior of economic agents and markets. Examines utility maximization and demand; cost minimization, profit maximization and supply; perfect competition and monopoly; imperfect competition and game theory; and general equilibrium, social welfare and market failure using sophisticated mathematical tools.

Course Content: The objective of this course is to provide an overview of the most important concepts of microeconomics. The material in this course serves as the foundation for many fields in economics, including labor, health, education, industrial organization, trade, environmental economics, and even macro.

We start by studying consumer theory, gaining an understanding of how consumers' preferences and budgets lead to their consumption choices and the derivation of individual and market demand curves. We then study producer theory and will learn how available technologies lead to cost functions and supply curves. Having gained an understanding of both the demand and the supply sides of economies, we proceed by studying the interactions of consumers and firms in different types of markets.

Learning Outcomes: Students will gain proficiency in basic microeconomic concepts and a proficiency in microeconomic analysis. This builds on the basic microeconomic concepts and requires

the ability to examine models of agents' decisions, including consumer utility maximization and firm profit maximization, using mathematical tools.

Prerequisites: The prerequisites for this course are (ECON 201 or 201H) and (MTH 241, 251 or 251H).

Textbook: There is no required textbook for this course, though it is strongly recommended that you obtain an intermediate microeconomics textbook for reference during this class and your future economics coursework. A non-exclusive list of recommended textbooks follows:

- Varian, Hal: *Intermediate Microeconomics: A Modern Approach* (This is the text we will follow most closely)
- Varian, Hal: Intermediate Microeconomics with Calculus
- Nicholson and Snyder: Microeconomic Theory: Basic Principles and Extensions

Older editions of most of these texts can be found online for low cost, and free pdf versions of some can be found using Google.

Canvas: All announcements, assignments, and grades will be will be posted on Canvas (canvas.oregonstate.edu). This is the official website for the course, and you will be responsible for any and all information that is posted there. If you experience any errors or problems, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the IS Service Desk online.

Attendance: Your grade will not formally depend on your attendance during the lectures, but you will be responsible for everything that is discussed in class. As a general rule you should NOT expect lectures, slides, notes, or other materials to be made available outside of the scheduled class time.

Homework: There will be weekly homework assignments throughout the term. No late assignments will be accepted. You are encouraged to work together in groups, but each person must submit their own assignment. Many of the exam questions will be *very* similar to homework questions.

Exams: There will be two midterm examinations and one comprehensive final examination. The midterms will be assigned during weeks 4 and 8. The final exam will be assigned during finals week (week 11). All exams will be administered on Canvas and will be "take-home" format. You will have at least 24 hours to complete the exam, and you can use any reasonable source to answer the questions, including lecture notes and textbook resources.

No makeup exams will be given. If a midterm is missed due to a *documented* emergency, the weight of that exam will be placed on final. An documented emergency that causes you to miss the final will result in an incomplete for the course. Missing any exam for a reason other than a documented emergency will result in a score of zero.

Grades: Your grade will be calculated based on the following weights:

Homework: 50% Midterm 1: 15% Midterm 1: 15% Final: 20%

The *minimum* letter grade that you will receive based on your weighted total of points earned is given below:

Diversity Commitment: The School of Public Policy in the College of Liberal Arts is a community that includes and values the voices of all people. As such, we recognize the social barriers that have systematically marginalized and excluded people and communities based on race, ethnicity, gender, sexual identity, socioeconomic background, age, disability, national origin and religion. We are committed to the equity of opportunities, and strive to promote and advance diverse communities. We value and proactively seek genuine participation from these historically under-represented and underserved groups, and recognize them as an essential component of creating a welcoming and rich academic, intellectual, and cultural environment for everyone.

Statement Regarding Students with Disabilities: Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval, please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Religious Holiday Statement: Oregon State University strives to respect all religious practices. If you have religious holidays that are in conflict with any of the requirements of this class, please see me immediately so that we can make alternative arrangements.

Academic Integrity and Expectations for Student Conduct: The Student Conduct Code establishes community standards and procedures necessary to maintain and protect an environment conducive to learning, in keeping with the educational objectives of Oregon State University. Academic or Scholarly Dishonesty is prohibited and considered a serious violation of the Student

Conduct Code. It is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another. See the following link for additional information: https://beav.es/codeofconduct.

Academic Integrity: Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Student Conduct and Community Standards, or contact the office of Student Conduct and Mediation at 541-737-3656.

Reach Out for Success: University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at oregonstate.edu/ReachOut. If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)

Tentative Schedule (Chapters reference the 9th edition of Varian's *Intermediate Microeconomics*)

	Monday	Wednesday
Week 0	_	Introduction and Math Review
		Appendix A
Week 1	Budget Constraints	Preferences
	Chapter 2	Chapter 3
Week 2	Utility	Choice
	Chapter 4	Chapter 5
Week 3	Demand	Income & Substitution
	Chapter 6	Chapter 8
Week 4	Intertemporal Choice	Midterm 1
	Chapter 10	No class
Week 5	Uncertainty	Technology
	Chapter 12	Chapter 19
Week 6	Cost Minimization	Monopoly
	Chapter 21	Chapter 25
Week 7	Oligopoly	Veteran's Day
	Chapter 28	No class
Week 8	Pure Competition	Midterm 2
	Chapter 23	No class
Week 9	Factor Markets	Exchange
	Chapter 27	Chapter 32
Week 10	Production	Externalities
	Chapter 33	Chapter 35