Syllabus EC301 Intermediate Microeconomics

Last Updated on January 4, 2019

Instructor. My name is Hanzhe Zhang. My office hours are Tuesdays 3-4pm in 206 Old Botany, or by appointment. Lectures are Tuesdays and Thursdays 8:30-9:50AM or 10:20-11:40AM in S109 South Kedzie Hall. For any questions not found on the syllabus, please email me: hanzhe@msu.edu or the head TA, Zijian Qi, qizijian@msu.edu.

Teaching Assistants. The teaching assistants are responsible for grading all the problem sets and exams, and answering all the questions related to problem sets and exams during help room hours. All the teaching assistants use the EC301 Help Room as their office hours. Please visit the Help Rooms whenever it is convenient for you for general economic questions or help working on economic problems, as well as procedural questions (e.g., clarifying grading policy, etc.). Hours are listed below.

TA's Office Hours and Help Room
Location: 3rd Floor West Wing in Main Library

	Section 001	Section 002	Starting	Ending
Monday 3-6pm	David Hong hongdav2@msu.edu	Chia-Hung Kuo kuochia2@msu.edu	1/14	4/29
Monday 6-9pm	Su Hwan Chung chungsu@msu.edu	Yiqian Wang wangy160@msu.edu	1/14	4/29
Tuesday 3-6pm	Zijian Qi qizijian@msu.edu	Yuxian Xiao xiaoyuxi@msu.edu	1/15	4/30
Tuesday 6-9pm	Yuxian Xiao xiaoyuxi@msu.edu	Zijian Qi qizijian@msu.edu	1/15	4/30
Wednesday 3-6pm	Benjamin Miller mill3104@msu.edu	Salem Rogers roger409@msu.edu	1/16	5/1
Wednesday 6-9pm	Minkyu Kim kimmink9@msu.edu	Dongming Yu yudongmi@msu.edu	1/16	5/1

Who Should Take This Class? This class will be a mathematically demanding and reasoning-intensive class. You are encouraged to take this class if you enjoy solving challenging problems and enjoy learning about the fascinating topic of microeconomics, the fundamental building blocking for all of economics. The main mathematical prerequisites is single-variable calculus MATH124. However, those who have advanced math preparations have routinely done well in this class. Expect to learn new mathematics and statistics in this class! The rudiments of probability and constrained optimization are introduced when needed. In order to do well in this class, you should

1. regularly attend lectures and participate in discussions

2. work hard on the problem sets and understand every step of every problem, and

3. relate abstract concepts introduced in lectures to everyday life and economic activities.

Required Textbook. The required textbook is **Bernheim and Whinston, Microeconomics, Second Edition**. First edition is acceptable. I follow the book quite closely, so it is easy for the students to preview before the lecture and review after the lecture.

Lectures. There will be in-class exercises in every class that count towards your final grade. Selected lecture notes will be posted after each lecture. The notes should serve only as complements to lectures, rather than substitutes for lectures. Note that all the contents covered in the class form the basis for the exam, rather than the contents posted in the lecture notes. Therefore, class attendance is required.

Problem Sets. There will be 11 problem sets. Problem sets serve as additional exercises to improve your understanding of the course materials. You must turn in your individual problem set. You should understand every question on the problem set, as these problems form the basis of the questions on the exams. All problem sets are due at the **beginning** of the class. **No** late submission is accepted. Early submissions are encouraged.

Exams. There will be 4 exams. Lectures and problem sets form the basis of the materials in the exams. Each exam focuses on the most recent topics but knowledge from previous exams is required. Exams are *closed book*, but one double-sided letter-sized (8.5in×11in) typed or hand-written cheat-sheet is allowed. Each exam consists of three types of questions: (1) the exact questions that have appeared in the problem sets, (2) variants of the questions that have appeared in the problem sets (for example, with number changed, with parts deducted), and (3) questions that can be answered if you have mastered the knowledge taught in the lectures. **There is no make-up offered for each exam: anyone who does not take an exam receives a score of 0 on the exam**. If you are excused from an exam due to medical or family emergency, your make-up exam will be a **comprehensive final exam** in the finals week.

Grading Policy. The grade is calculated as follows.

1. Class participation is 20% of your grade. Coming to and actively participating in a lecture counts roughly as 1% of your grade.

2. Problem sets are 20% of your grade. You can drop your lowest problem set, so each problem set is worth 2% of your grade.

3. Each of the four exams is 15% of your grade. If you are excused from an exam due to medical or family emergency, your make-up exam will be a **comprehensive final exam** in the finals week.

90% is required for a 4.0 but does not guarantee a 4.0. 60% is required for a 2.0 but does not guarantee a 2.0.

Honors Option. Unfortunately, no honors option is offered for this class. If you want to take an honors intermediate microeconomics class, you are recommended to enroll in EC251H.

Recommendation. Many have asked me for recommendation letters for graduate schools. I am always very happy to write you a recommendation letter to help you succeed, when I believe that I can write you a strong letter that improves your chance in graduate admissions. I can write a strong letter if (1) you have a 4.0 or near-4.0 GPA in the class, AND (2) you have interacted with me one-on-one in office hours and other occasions for sufficiently many times. If I do not know you well personally, even if you have a near-perfect score in the class, it will not help your graduate admission substantially, and I am not comfortable supporting someone who I don't know well. Please also fill out this form before you see me: https://reg.msu.edu/read/StudentReferenceRequestReleaseForm.pdf.

RCPD/Grief Absence/Medical Emergency/Religious Observance. If you need alternative test site authorization, please fill out the necessary forms 7 days before the exam for me to be able to accommodate you for the exam. Please inform me as soon as possible when other situations arise.

Course Outline

Class	Date	Administrative	Content	Ch
1	Tuesday, 1/08		Preliminaries	1
2	Thursday, 1/10	**Open Add ends**	Balacing Benefits and Costs	3
3	Tuesday, 1/15	PS 1 due	Consumer Preferences	4
4	Thursday, 1/17		Constraints, Choices, and Demand	5
5	Tuesday, 1/22	PS 2 due	Demand Curve	5,2
6	Thursday, 1/24		Constructing Demand Curve	5
7	Tuesday, 1/29	PS 3 due	Review for Exam 1	
8	Thursday, 1/31	**Drop with Refund**	Exam 1	
9	Tuesday, 2/05		Production	7
10	Thursday, 2/07		Cost	7
11	Tuesday, 2/12	PS 4 due	A Price-Taker's Profit Maximization	8
12	Thursday, 2/14		Supply Curve	9,2
13	Tuesday, 2/19	PS 5 due	Market Demand and Market Supply	14,2
14	Thursday, 2/21		Competitive Markets	14
15	Tuesday, 2/26	PS 6 due	Reivew for Exam 2	
16	Thursday, 2/28	**Drop without Grade**	Exam 2	
17	Tuesday, 3/12		Market Interventions: Taxes and Subsidies	15
18	Thursday, 3/14		Market Interventions: Policies to Influence Prices	15
19	Tuesday, 3/19	PS 7 due	Monopoly	17
20	Thursday, 3/21		Monopsony	17
21	Tuesday, 3/26	PS 8 due	Review for Exam 3	18
22	Thursday, 3/28		Exam 3	
23	Tuesday, 4/02		Game Theory: Dominant Strategies	12
24	Thursday, 4/04		Game Theory: Dominated Strategies	12
25	Tuesday, 4/09	PS 9 due	Game Theory: Nash Equilibrium	12
26	Thursday, 4/11		Application: Public Goods	12
27	Tuesday, 4/16	PS 10 due	Application: Oligopoly	19
28	Thursday, 4/18		Game Theory: Playing Unpredictably	12
29	Tuesday, 4/23	PS 11 due	Review for Exam 4	
30	Thursday, 4/25		Exam 4	
	Wednesday, 5/01		make-up final exam	