PPL 805: Microeconomic Theory

Instructor
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Logistics
This class meets on Mondays, from 6 to 9 p.m., in Wells Hall A202. This is a three-credit course. **Class begins on Monday, August 25.**

Office Hours
I will hold regular office hours from 12:00-1:30 pm on Thursdays both in person and through Zoom. If this time does not work for you, feel free to send me an email and we can set up a different time to meet. My office will be at **104 Old Botany.**

Zoom details:
https://msu.zoom.us/j/99355747267

Meeting ID: 993 5574 7267
Passcode: 805805

Help
If you have questions about course content or if you need guidance while working on assignments, I strongly encourage you to ask me for help during my office hours.

Objectives
This is a course in microeconomic theory in which we investigate how firms and consumers make decisions and how their combined actions determine outcomes in market economies. Our primary goal is to use the framework that we develop to examine the efficiency of market economies in allocating scare resources. In situations where the market fails to allocate resources in an economically efficient manner, we will try to understand ways in which the government can craft policies aimed at making markets more efficient. We will also study the "efficiency-equity tradeoff" that governments often face in designing economic policies. The framework and tools that we develop in this course are used in most advanced and applied courses in economics (including courses on public policy).

Textbook
Highly recommended, but **not** required: Microeconomics (7th, 8th, or 9th edition) by Jeffrey M. Perloff (Pearson).

Additional Readings
You are responsible for three sets of notes that you will find on the course D2L webpage (these readings are **required**). They are all located under the tab "Readings." Online Notes #1 are

entitled “Demand,” Online Notes #2 are entitled “Complex Pricing,” and Online Notes #3 are entitled “Rivalry.”

Prerequisites
There are no math prerequisites for this course (beyond those required for the MPP Program). However, it is important to note that **we will make extensive use of high-school algebra**. The expectation is that you have mastered this skill. You will be expected to use it throughout the term. If you need to brush up on your math, I suggest videos from Khan Academy. These can be found on YouTube and cover all levels of math, from elementary school through PhD-level mathematics.

Assignments
There will be seven problem sets, a mid-term exam, and a final exam. You will have one week to work on each problem set (details are provided below).

The **mid-term exam** is designed to see if you have mastered the tools that we develop during the course. This exam will cover Supply and Demand, Consumer Theory, Product and Cost Curves, Perfect Competition, and the basics of Monopoly with Linear Pricing. The mid-term will be problem-based and will be similar to the problem sets. Except for extraordinary circumstances, midterm will not be rescheduled. There is no retake for midterm. Any issues with midterm date must be communicated at least two weeks before the date of the midterm.

The **final exam** requires you to analyze market failures (imperfect competition, externalities, etc.) and to assess potential policy prescriptions. Although the final will be more policy-oriented than either the mid-term or the problem sets, you will still need to understand the economic roots of the market failures, as well as the economic arguments for and against specific policy solutions. Additional details will be provided in class near the end of the semester.

Problem Set Topics	*Solutions Due by 6pm on Monday*
Problem Set 1 (Supply and Demand)	September 15
Problem Set 2 (Firm’s View of Demand)	September 22
Problem Set 3 (Deriving Demand, Production, and Costs)	October 6
Problem Set 4 (Monopoly with Linear Pricing)	October 13
Problem Set 5 (Monopoly with Complex Pricing)	November 10
Problem Set 6 (Rivalry)	November 17
Problem Set 7 (Factor Markets and Market Failure)	December 1

NOTE: Problem sets turned in late will **NOT** be graded. Problem set answers must be **typed up, not handwritten (except for graphs).** You may use LaTeX or MS Word. Please submit answers in PDF format.

Grades
Your course grade is determined by your scores on the problem sets (25%), the midterm exam (35%) and the final exam (40%).

Course Schedule

Date	*Material*	*Problem Set*	*Readings*
August 25	Intro, Supply & Demand		Textbook chapters 1-3
September 8	S&D, Demand (Firm's View)	Problem Set 1	Online Notes #1 (Demand)
September 15	Demand (Firm's View); Deriving Demand	Problem Set 2	Textbook chapters 4-5
September 22	Deriving Demand		
September 29	Production, Costs, and Profit Maximization	Problem Set 3	Textbook chapters 6-7
October 6	Perfect Competition; Intro to Monopoly	Problem Set 4	Textbook chapters 8, 11
October 13	More on Monopoly; review for Midterm Exam		
October 16/17	**Midterm Exam**		
October 27	The Monopoly Problem; Complex Pricing		Online Notes #2 (Complex Pricing)
November 3	Monopoly with Complex Pricing	Problem Set 5	
November 10	Game Theory	Problem Set 6	Textbook chapter 12 and 13; Notes #3 (Rivalry)
November 17	Externalities and Public Goods		Textbook chapter 18
November 24	Information	Problem Set 7	
December 8, Monday, 8-10 pm	**Final Exam**		

Notes on reading assignments: the following subsections of the textbook will **not** be covered, so you do not need to read these subsections.

Chapter 3:	3.4
Chapter 4:	4.5
Chapter 5:	5.4
Chapter 6:	6.6
Chapter 11:	11.6
Chapter 12:	12.7
Chapter 13:	13.4

Class Absence

You are responsible for all announcements made in class during the term. If you miss class or if you miss an announcement due to tardiness, it is **your responsibility** to find out what you missed. Feel free to contact me by email to see if you missed anything. You are also encouraged to check emails and the course page on D2L often for announcements related to homework due dates and exams.

Academic Integrity

All students in this class are bound by the Spartan Code of Honor which promises honesty and personal integrity in all academic work. In particular, the Spartan Code of Honor reads as follows:

> **As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do.**

All violations of this code of honor will be punished harshly. This includes attempts to circumvent the rules that apply to exams and homework assignments.