

**Carnegie Mellon University
Heinz College**

90-710 Applied Economic Analysis
Course Syllabus
Fall 2024

INSTRUCTOR

Lowell Taylor
H. John Heinz III University Professor of Economics
Office: 2206 Hamburg Hall
Office Hours: Mondays 4:00-5:30 and by appointment
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COURSE ORGANIZATION

Class meets each Tuesday and Thursday, August 27 through December 5, with the exception of October 15 and 17 (mid-semester break), November 5 (election day), and November 28 (Thanksgiving holiday). Classes are scheduled 9:30 to 10:50 AM, and 2:00 to 3:20 PM. Most Fridays we have an optional review scheduled 11:00 AM to 12:20 PM, which will be led by one of our head TAs. The scheduled meeting place for lectures and review sessions is A301 Hamburg Hall.

Teaching assistants will hold regular office hours, conduct review sessions, and assist in grading assignments and exams. TAs will also be available for appointments at your mutual convenience. We will announce office hours and locations during the first week of class. Our head TAs are outstanding PhD students here at the Heinz College:

Zijun Ding zijund@andrew.cmu.edu
Ashley Orr aorr@andrew.cmu.edu

We also have three excellent MS students serving as TAs:

Leah Claire Koyle lkoyle@andrew.cmu.edu
Pranay Raj Peddareddy pranayrp@andrew.cmu.edu
Sydney-Anne Wilczynski swilczyn@andrew.cmu.edu

READINGS

Readings are from *Principles of Microeconomics* by Robert Frank, Ben Bernanke, Kate Antonovics and Ori Heffetz. The book is published by McGraw-Hill. The current edition is the 8th edition (2022).

COURSE CONTENT AND OBJECTIVES

Microeconomics is the study of how individuals make choices and how those choices interact to shape consequential outcomes in society. The economic approach emphasizes *rational decision making under conditions of scarcity*.

This course is an introduction to the basic concepts and tools of microeconomics. We study how markets work, and analyze the impact of public policy on market outcomes and on individual well-being. By the end of this term you should:

- develop a deep understanding of core concepts in microeconomics—ideas that are valuable for good decision making;
- develop an ability to use key economic ideas in formulating and evaluating public policies;
- come to see how governments shape societal outcomes; and
- develop the capacity to critically analyze economic arguments as they appear in public debate, e.g., be able to assess reporting on economic issues in the media.

REQUIREMENTS

There are no prerequisites for this course. However, we make extensive use of graphs and basic algebra. It is crucial that you be comfortable with these tools. The first review session will include a discussion of graphs and simple algebra, and TAs will provide additional help as needed.

Please read the suggested section of the textbook prior to the class meeting. It is also a good idea to read about current economic issues in credible news sources, and you are welcome to suggest articles or ideas you would like me to discuss.

GRADING AND ACADEMIC INTEGRITY

Your grade depends on the extent to which you demonstrate the capacity to solve problems and think critically about microeconomic arguments.

There will be nine assignments (problem sets). You are encouraged to work in groups on the problem sets, and are encouraged also to consult TAs (with your group or on your own). While you may work in groups, *you should submit your answers expressed in your own words*. Also, *I ask that you not use generative AI* to assist in completing your work. Problem sets are due before midnight on the specified day. Only assignments that are submitted on time will be graded, except in an emergency or when arrangements have been made in advance. As an accommodation, the lowest assignment grade of the semester will be dropped when calculating your final grade.

The final course grade is based on the three exams (25 percent for each of the first two exams and 40 percent for the third exam) and the problem sets (10 percent).

If you have issues concerning grading, you may submit re-grade requests within 48 hours of receiving your graded assignment or exam. Grading is on Gradescope. You can submit re-grade requests directly on that website.

Students may be excused from submitting an assignment or taking an exam as scheduled only if arrangements are made in advance or in the event of an emergency.

A score of 0 will be assigned for an unexcused missed assignment or exam. Also, a grade of 0 will be assigned for any assignment or exam that does not conform to University policies regarding academic integrity, and other penalties may also pertain. See the Heinz College Student Handbook for details.

THOUGHTS FOR THE UP-COMING SEMESTER

I hope your graduate school experience proves to be enjoyable, but it is likely to entail stress as well. The University Provost provides the following thoughts for students. They seem very important to me:

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services is here to help: call 412-268-2922 and visit their website at <http://www.cmu.edu/counseling/>. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

DIVERSITY, INCLUSION & EQUITY

I support the following Heinz College statement—which appears on our web page, <https://www.heinz.cmu.edu/about/diversity>.

By design, Heinz College is an empathetic and open environment that inspires continuous learning, conversation, and intelligent action that will impact society for the better. Diversity, inclusion, and equity are not radical concepts—rather, the ongoing pursuit of

these ideals, and a campus climate of belonging in which every person in our community can thrive, are fundamental to our mission.

STUDENT ACCOMMODATIONS

The University Provost asks that we provide the following recommendation for students:

If you have a disability and are registered with the Office of Disability Resources, I encourage you to use their online system to notify me of your accommodations and discuss your needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them ...

access@andrew.cmu.edu.

I will follow recommendations from the Office of Disability Resources regarding appropriate accommodations.

CLASS POLICY ON LAPTOPS AND CELL PHONES

Please **do not use laptops or cell phones** or other electronic communication devices during class. For those of you who like to have typed notes, I will provide class notes for every lecture on the course web page.

TENTATIVE COURSE OUTLINE AND SCHEDULE FOR THE SEMESTER

Note: Chapters listed below from the textbook.

- August 27. The goals and uses of economic analysis.
- August 29 and September 3. Key ideas about economic decision making. Introduction to supply and demand. Reading: Chapter 1 and 3
- September 5. Elasticities—definitions and applications. Reading: Chapter 4.
- September 10, 12, and 17. Competitive markets in the short run. Reading: Chapters 4, 5, 6, and 7 (only the section on efficiency).
- September 19. Competitive market analysis in the short run. This material is mostly covered in Chapter 6 and in the section on efficiency in Chapter 7.
- September 24. Competitive market analysis in the long run. Reading: Chapter 7.
- September 26. First in-class exam. This exam covers Lectures 1 to 8, and material from Chapters 1 – 6, plus part of Chapter 7.
- October 1. Competitive market analysis in the long run. Reading: Chapter 7.
- October 3 and 8. Comparative advantage and international trade. Reading: Chapters 2 and 15.
- October 10. Monopoly. Reading: Chapter 8.

- October 14 – 18. MID-SEMESTER BREAK. HAVE A GREAT BREAK!
- October 22. Monopoly—policy responses.
- October 24 and 29. Game theory. Reading: Chapter 9.
- October 31. Second in-class exam. This exam covers Lectures 9 to 16, and material from Chapters 2, 15, 7, 8, and 9.
- November 7. Externalities and inefficiency in the market. Reading: Chapter 11.
- November 12. Externalities and environmental policy. Reading: Chapter 11.
- November 14. The economic impact of imperfect information. Reading: Chapter 12.
- November 19. Introduction to labor economics. Reading: Chapter 13.
- November 21 and 26. Labor economics—human capital, discrimination, and inequality. Reading: Chapter 13.
- November 27 – 29. THANKSGIVING HOLIDAY. ENJOY!
- December 3 and 5. Inequality and public policy.
- Week of December 9. Third in-class exam. The third exam focuses primarily on material from the last third of the course, i.e., Lectures 17 to 24 and Chapters 9, 11, 12, and 13.