

Elliott School Online Microeconomics Program

This online (non-credit) program is designed to give students a background in introductory microeconomics. The program, offered by the Elliott School's Institute for International Economics (IIEP), does not assume any prior knowledge of economics. The program will include a combination of streaming pre-recorded lectures, weekly live online office hours held on Saturday and Sunday, weekly homework assignments, and two quizzes.

Students will have significant flexibility about when they complete activities.

- The program is “asynchronous,” i.e., there are no set times for all students to meet simultaneously.
- There are however firm final due dates for homework and assignments to help ensure that students make steady progress.
- Participants are welcome to turn in the material in advance of these deadlines. This may help students traveling during the summer.

All assignments are “open book” so that students may consult readings and online videos when completing the required work.

Successful completion of this program (with a minimum of 70 percent of possible points) can satisfy the Elliott School microeconomics prerequisites requirement.

Program Schedule

This program will be available during two separate sessions during summer 2019.

- The first session begins formally on June 1st and the last assignment is due by July 14th.
- The second (alternative) session begins formally on July 15th and the last assignment is due by August 19th.

Participants will have access to the materials once payment is received by the Institute for International Economic Policy; access will continue through the end of the fall semester. We encourage students to spend more than the minimum five weeks to review the material. However, online office hours and feedback/grading on assignments will only occur during the scheduled sessions.

Overview

Microeconomics is the study of how consumers, workers, and firms make “optimal” choices with limited resources. This analysis takes place in a “market,” where prices of goods and services are critical when people decide how much to buy, how much to sell, where to work, and how many people a firm will hire. We will also develop basic tools used in public policy to understand, for example, the economic impact of government policies such as taxes, subsidies, trade liberalization, and economic development programs.

Note that this program is the first part of the combined Elliott School economics principles program.

Students should expect to spend about eight hours a week over five weeks. This includes watching lectures, reading the textbook and completing assignments.

Program Prerequisites

- No background in economics is necessary.
- This program (and most economics coursework at the Elliott School) uses relatively simple math concepts (e.g. slope of a line, ratios, areas of triangles and rectangles, equations of a line, reading and understanding graphs).
- No calculus is used. No statistical analysis is used.
- It is essential that students be willing to think abstractly and further develop strong analytical thinking.
- Students must have regular and reliable access to a high-speed Internet connection in order to watch lecture videos as well as access written materials, homework and quizzes.
- All assignments must be submitted as a single PDF file. There are free smartphone apps that allow you to scan your assignments if you not have access to a full-size scanner (e.g. Tiny Scanner).
- Try to complete this course using a regular computer or tablet. There is almost no way to absorb the lecture material using a phone; there are too many details to see on such a small screen.

Textbook: No textbook is formally required but Gregory Mankiw's *Principles of Economics* is *highly recommended*. Readings from the 7th edition will be assigned throughout. This is an older edition; other editions should be fine.

Assessment of Student Progress:

- Homework (34 percent of total grade):
- Quiz 1 (33 percent of total grade)
- Quiz 2 (33 percent of total grade)

Participants must receive 70 percent of possible points to satisfy the macroeconomics prerequisite.

Signing Up for Online Office Hours

We will circulate a "doodle" signup for office hours every week. (See www.doodle.com if you would like to get a sense of this.) This will help organize the office hours since many people may participate at the same time.

Learning Objectives

- Participants will become familiar with microeconomic concepts such as marginal cost, marginal benefit, consumer surplus, and producer surplus
- Participants will learn to use basic microeconomic models to analyze consumer and producer behavior.
- Participants will be able to use supply and demand analysis to evaluate the benefits and costs of government actions such as taxes and subsidies.
- Participants will learn how economists analyze the consequences of "market failures" such as public goods and environmental pollution.

Course Topics and Schedule (Tentative)

Week 1

Module 1: Basic concepts of Microeconomics

- Economic scarcity and the price mechanism
- How supply and demand work in a market economy

Module 2: Consumer theory

- Demand curves (shape, slope, and “shifters”)
- Elasticity of demand (own-price, income, and cross-price elasticities)
- Substitutes and complements
- Consumer surplus; marginal benefit of consumption (marginal utility)

Week 2

Module 3: Production costs

- Marginal, fixed, and variable costs
- Increasing, decreasing, and constant returns to scale

Module 4: Imperfect competition

- Monopoly and Oligopoly
- Marginal revenue=marginal cost < price
- Impact on consumers and economic welfare

Week 3

Module 5: Perfect competition

- Price = marginal cost
- Supply curve (shape, slope, and “shifters”)
- Elasticity of supply
- Producer surplus
- Economic vs. accounting profit
- Long run vs. short-run equilibrium

Module 6: Economic efficiency

- Deadweight losses
- Inputs and labor markets
- Production possibility frontiers, opportunity cost, and relative prices

Week 4

Module 7: Government interventions

- Impact of taxes and subsidies
- Impact of price intervention (price floors and price ceilings)

Week 5

Module 8; Externalities and public goods

- Negative and positive externalities: policy responses
- Public goods and “tragedy of the commons”

Module 9: Markets for Factors of Production: Labor and Capital Markets

- Supply and demand for labor
- Supply and demand for capital

Part 2: Additional Required Material (not graded formally for this program---nevertheless essential for later economics courses)

Module 10: Analyzing Multiple Markets Simultaneously---General Equilibrium

Module 11: Government Intervention in Markets Part II (Price Ceilings and Price Floors)

Module 12: Market Failure II (Public Goods)