

Elliott School Online Microeconomics Program

This online (non-credit) program is designed primarily to help students who have already completed an introductory microeconomics course but need to review the material for use in other courses. The program, which is organized by the Elliott School's Institute for International Economic Policy, presumes exposure to introductory microeconomics. Graphical and algebraic techniques will be used and the emphasis will be on developing strong economic intuition. Formal mathematical modeling using calculus is not developed in the program.

- The primary goal of this program is to prepare students take courses at the Elliott School, such as Econ 6280 (Survey of International Economics) and Econ 6250 (Survey of Economic Development). Students choosing Econ 6283 (International Trade Theory and Policy) should strongly consider taking our intermediate micro program instead.

The program is designed to be completed over a five-week period with intensive effort (about 8 hours per week). Participants will have access to all materials as soon as payment is received by the Elliott School's Institute for International Economic Policy (IIEP). Students will continue to have access to these materials until January 1, 2020.

The main set of resources are video lectures offered either through Vimeo or YouTube. Practice problems and answer keys will be distributed through "Coursesites.com".

Treat the video lectures as you would an in-person class. Do not simply watch the videos.

Take detailed notes. Repeat the videos to understand concepts you do not understand. Study your notes. Economics is a discipline that one can only understand by writing and practicing. Passive viewing will not be sufficient for the vast majority of students.

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 (optional) 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.
- 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.

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)