Elliott School Online Economics Principles Program

This online (non-credit) program is designed to give students a background in introductory microand macroeconomics. The program, offered by the Elliott School's Institute for International Economic Policy (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.

Successful completion of this program can satisfy the Elliott School economics prerequisites requirement and prepare students for Econ 6280 (Survey of International Economics) and Econ 6250 (Survey of Development Economics). More details on student assessment is available below.

Students will have significant flexibility about when they complete activities.

- The program is "asynchronous," i.e., there are no required times for all students to meet simultaneously.
- There are however *firm final due dates* for homework and quizzes to help ensure that students make steady progress. All assignments will be submitted electronically.
- Participants are welcome to turn in the material in advance of these deadlines. This may help those traveling during the summer.

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

This program begins formally on June 1st and the last assignment is due by August 19th. A more detailed schedule is noted below.

Participants will have access to the materials once payment is received by IIEP; access will continue through the end of the fall semester. However, online office hours and feedback/grading on assignments will only occur during the scheduled session.

Overview

The first half of the program focuses on microeconomics, which 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 as people decide how much to buy, how much to sell, where to work, and how many workers a firm will hire. We will also develop basic tools used in public policy to understand, for example, the economic impact of taxes, subsidies, international trade, and international economic development programs.

The second half is on macroeconomics. Topics include how to measure economic activity (e.g. economic growth, unemployment and inflation) and the role of the financial system (e.g. the money and bond markets) in a modern economic system. Macroeconomics also focuses on possible government policy responses to economic downturns and inflation, including fiscal policies (such as tax policies and government spending), monetary policies undertaken by central banks, and foreign exchange rate policies.

Note that this program is essentially a combination of the separate micro- and macroeconomics online principles program offered by IIEP. Students therefore have the option of doing only one of these two sections.

Program Structure

There will be multiple sections of the program

Pre-Program: Students should complete the math review and videos about economic jargon before the program starts on June 1st.

Graded material

<u>Part 1 (Fundamentals of Microeconomics):</u> This material will be the focus for assigning the "grade" for the first part of the program and must be completed by July 14th. (See program schedule below for dates.)

<u>Part 2 (Fundamentals of Macroeconomics):</u> This material will be the focus for assigning the "grade" for the second part of program and must be completed by August 19th. (See program schedule below for dates.)

Prerequisites

- No background in economics is presumed.
- Students must be able to use 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. A math review is included in the pre-program materials.
- It is essential that students be willing to think abstractly and further develop strong analytical thinking. The course website includes some review materials for needed math skills
- No statistical analysis will be used.

Strategy to Approach Material

The graded part of the program (Part 1 and Part 2) lasts about twelve weeks; students must work diligently and consistently throughout. This program will be intensive for many students. Do not fall behind; you will be hard pressed to catch up. Students should plan on watching about four hours of lecture per week along with approximately four more hours on reading assignments, homework assignments, and preparing for quizzes. This obviously can vary enormously across students who all learn in different ways.

Textbook: No textbook is required for this course but Gregory Mankiw's <u>Principles of Economics</u> is highly recommended. Readings from the 7th edition will be noted throughout. This is an older edition; other editions should be fine.

Assessment of Student Progress: Students must achieve at least 70 percent of all possible points on Part 1 to satisfy the Elliott School microeconomics prerequisite. Similar performance is required for Part 2 to satisfy the macroeconomics prerequisite.

Part 1: Assessment of Student Progress for Microeconomics:

- Homework (34 percent of total grade):
- Quiz 1 (33 percent of total grade)
- Quiz 2 (33 percent of total grade)
- Part 1 must be completed by July 14th

Part 2: Assessment of Student Progress for Macroeconomics:

- Homework (34 percent of total grade):
- Quiz 3 (33 percent of total grade)
- Quiz 4 (33 percent of total grade)
- Part 2 must be completed by August 19th

Signing Up for Online Office Hours

Instructors will circulate a "doodle" signup for office hours. (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. Please let us know if you cannot make the office hours the day before the event so that we know who cannot participate. This is simple courtesy. See class schedule below for specific dates and times.

Academic Integrity

This program is being offered to help students prepare for their required coursework in economics. Any infraction of academic integrity (collaborating with another person on a quiz or copying someone else's work) simply hurts the student. All students must use this material in other courses; "cheating" only hurts the student himself or herself.

Students are not allowed to share this material with others who have not paid for the program.

Program Schedule

Note that these are final due dates. Participants are welcome to complete this material in advance.

Part 1--Microeconomics

•	June 1:	Microeconomics program begins
•	June 9:	Microeconomics homework #1 due
•	June 16:	Microeconomics homework #2 done
•	June 23:	Microeconomics Quiz 1 due
•	June 23:	Microeconomics homework #3 due
•	July 7:	Microeconomics homework #4 due
•	July 14:	Microeconomics Quiz #2 due

Part 2---Macroeconomics

•	July 15:	Macroeconomics program begins
•	July 21:	Macroeconomics homework #1 due
•	July 28	Macroeconomics homework #2 due
•	July 28:	Macroeconomics Quiz 1 due
•	August 4:	Macroeconomics homework #3 due
•	August 11:	Macroeconomics homework #4 due
•	August 19:	Macroeconomics Quiz 2 due

Detailed Course Topics

<u>Pre-course Preparation</u>: Students are encouraged to view the math review and economic jargon/terminology videos.

Part 1: Microeconomics (June 1st through July 14th)

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
- Price > Marginal revenue=marginal cost
- 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)

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----Fundamentals of Macroeconomics (July 15th through August 19th)

Week 1

Introduction to macroeconomics and math review

Measuring macroeconomic performance

- National income accounts
- GDP and GNP and economic growth
- Inflation, consumer price index, and GDP deflation
- Unemployment rate
- Real and nominal wages, GDP, and interest rates

Week 2

Aggregate Demand and Aggregate Supply

- Short run sticky prices (Keynesian models)
- Long-run flexible prices
- Short-run and long-run aggregate supply
- Aggregate production function

Money market

- Role of central banks
- Money supply creation and commercial banks
- Interest rates (real and nominal)

Bond market

- Role of financial intermediaries
- Relationship between bond prices and interest rates

Week 3

Labor market

- Aggregate labor demand and labor supply
- Wage flexibility and the unemployment rate

Fiscal Policies Introduction

- Government spending and tax policies
- Impact on aggregate demand, interest rates and prices

Monetary Policies Introduction

- Tools used by central banks
- Impact on aggregate demand, interest rates and prices

Week 4

- Short run aggregate demand policies
- Aggregate demand and supply: Basic structure of the model

Week 5:

Basics of open-economy macroeconomics

- Balance of payments accounts (and relationship to national income accounts)
- Foreign exchange markets