

AP[®] Macroeconomics

Syllabus 2

The initial discussion of this syllabus attempts to get students to think economically. A detailed outline of the course follows.

Texts

Required Text: Baumol, William J., and Alan S. Blinder. *Economics: Principles and Policy*. 7th ed. Fort Worth, Texas: The Dryden Press, 1997.

Supplementary Text: Tucker, Irvin B. *Economics for Today*. Minneapolis/ St. Paul, MN: West Publishing Company, 1997.

Course Outline

Unit 1: An Introduction to Economics (4 weeks)

Topic I: Basic Economic Concepts [CR1]

- A. Scarcity: What is it? Why is it so important to economic thought?
- B. Opportunity Cost: Define and compute it. Why can it never be avoided?
- C. Production Possibilities: Construct and interpret production possibilities schedules, and graphs; relate production possibilities curves to the issues of scarcity, choice and cost. Why are most PPCs bowed out?
- D. Specialization and Comparative Advantage: Define and calculate absolute and comparative advantages for production exchange.
- E. Functions of Any Economic System
 1. Answering the questions: What to produce? How to produce? For whom to produce?
 2. Define ways societies determine allocation, efficiency, and equity.

CR1—The course provides instruction in basic economic concepts.

Topic II: Demand, Supply, and Price Determination [CR3]

- A. Demand: Define and illustrate demand through schedules and graphs.
 1. Distinguish between change(s) in quantity demanded and change(s) in demand.
 2. Examine the inverse relationship existing between quantity demanded and price. Evaluate the Law of Demand.
 3. Identify and explain the variables that cause a change in demand.
 4. Illustrate graphically a change in demand versus a change in quantity demanded. [CR9]

CR3—The course provides instruction in national income and price determination.

CR9—The course teaches how to generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts.

- B. Supply: Define and illustrate supply through schedules and graphs.
1. Distinguish between change(s) in quantity supplied and change(s) in supply.
 2. Examine the direct relationship existing between quantity supplied and price. Evaluate the Law of Supply.
 3. Identify and explain the variables that cause a change in supply.
 4. Illustrate graphically a change in supply versus a change in quantity supplied.
- C. Equilibrium Price and Quantity: Define and illustrate equilibrium through schedules and graphs. [CR9]
1. Define and illustrate surpluses and shortages.
 2. Define the effects of surpluses and shortages on prices and quantities.
 3. Interpret the effects of a price floor and price ceiling on equilibrium price and quantity.
 4. Introduction to market failures: lack of competition, externalities, and public goods.

CR9—The course teaches how to generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts.

Unit 2: Measurement of Economic Performance (4 weeks)

Topic I: Gross Domestic Product and National Income Concepts [CR2]

- A. Measuring GDP, Four-Sector Circular Flow Model, and Flow Versus Stock
1. Expenditure approach $[C+I+G+(X-IM)]$ where
 - C = Personal Consumption Expenditures
 - I = Gross Private Investment
 - G = Government Consumption Expenditures and Gross Investment
 - X-IM = Net Exports
 2. Income approach $(W+I+R+P)$ where
 - W = Compensation of Employees
 - I = Net Interest
 - R = Rental Income of Persons
 - P = Profits (Non-income adjustments)
 3. Problems with calculating GDP: Nonmarket transactions, distribution, kind and quality of products.
 4. Changing Nominal GDP (NGDP) to real GDP (RGDP). How and why?
 5. Other national accounts: net national product (NNP), national income (NI), personal income (PI), and disposable income (DI).

CR2—The course provides instruction in measurements of economic performance.

Topic II: Unemployment and Business Cycles [CR5]

- A. The Roller Coaster: The four phases of the business cycle
- B. Total Spending and How It Affects the Business Cycle
- C. Unemployment: Defined
- D. Problems with the Unemployment Rat: Who is counted and who isn't?
- E. Types of Unemployment
 - 1. Seasonal, frictional, structural, cyclical
 - 2. Which type(s) affect the unemployment rate?
- F. Full Employment: What is it? What are the implications if achieved?
- G. The GDP Gap: Explaining lost potential

CR5—The course provides instruction in inflation, unemployment, and stabilization policies.

Topic III: Inflation [CR5]

- A. The Meaning and Measurement of Inflation
- B. The Consumer Price Index (CPI) and How It Is Computed
- C. Problems with the CPI
- D. Other Indexes: Producer Price Index
- E. Consequences of Inflation: shrinking incomes, changes in wealth, effect on interest rates
- F. Demand–Pull and Cost–Push Inflation

Unit 3: Macroeconomic Theory and Policy **(6 weeks)**

Topic I: The Classical Theory and the Keynesian Theory: An Introduction

- A. The Role of the Consumption Function
- B. Marginal Propensities to Consume and Save
- C. Why the Consumption Function Shifts and How It Affects Aggregate Demand
- D. The Role of the Investment Function
- E. Why is Investment Demand Unstable?
 - 1. Expectations
 - 2. Technological change
 - 3. Capacity utilization

- F. Investment as an Autonomous Expenditure
- G. Graphing the Aggregate Expenditure Function

Topic II: Keynesian Model in Action

- A. Government Spending and How It Affects Aggregate Demand
- B. Adding International Trade to the Aggregate Expenditure Model
- C. The Spending Multiplier: the math and its effects
- D. Recessionary and Inflationary Gaps: a Graphing Exercise [CR9]

Topic III: Aggregate Demand and Supply; National Income and Price Determination [CR3]

- A. Aggregate Demand Curve: Reasons for Its Shape
 - 1. Real balances effect
 - 2. Interest rate effect
 - 3. Net export effect
- B. Nonprice-Level Determinants of Aggregate Demand
- C. Aggregate Supply Curve
 - 1. Classical view
 - 2. Keynesian view
 - 3. Changes in equilibrium price and quantity with the three ranges
- D. Nonprice-Level Determinants of Aggregate Supply
- E. Macroeconomic equilibrium

CR3—The course provides instruction in national income and price determination.

Topic IV: Fiscal Policy/Public Sector

- A. Discretionary Fiscal Policy
 - 1. Changes in government spending
 - 2. Changes in tax rates
 - 3. Balanced-budget multiplier
- B. Supply-Side Policies
- C. Laffer Curve
- D. Government Size and Growth
 - 1. Financing budgets
 - 2. Government expenditure patterns

- E. Types of Taxation
 - 1. Progressive
 - 2. Proportional
 - 3. Regressive

- F. Federal Deficits and the National Debt
 - 1. The Federal Budget-Balancing Act
 - a. Gramm–Rudman–Hollings Act
 - b. Line-item veto
 - c. Budget ceiling
 - 2. Should we worry about deficits or the debt?

Topic V: Money, Banking, the Financial Sector, and Monetary Policy [CR4]

CR4—The course provides instruction in the financial sector.

- A. Three Functions of Money

- B. What Stands Behind the U.S. Dollar?

- C. The Three Money Supply Definitions
 - 1. M1: most narrowly defined money supply
 - 2. M2: adding near monies to M1
 - 3. M3: adding large time deposits to M2

- D. Financial assets: Money, Stocks, Bonds
 - 1. Time value of money (present and future value)
 - 2. Banks and creation of money
 - 3. Money demand
 - 4. Money market
 - 5. Loanable funds market

- E. The Federal Reserve System (FED)
 - 1. Origins and organizational structure
 - 2. Powers of the FED
 - a. controlling the money supply
 - b. clearing checks
 - c. supervising and regulating the banks
 - d. loaning currency to banks
 - e. acting as the bank for the U.S. government
 - 3. Tools of the FED
 - a. open market operations
 - b. discount rate
 - c. reserve requirement

- F. The Money Multiplier
 - 1. Theory versus reality
- G. Monetary Policy Shortcomings
 - 1. Money multiplier inaccuracies
 - 2. Lags in policy effects
- H. Monetary Policy
 - 1. The demand for money and how it may affect interest rates
 - 2. How monetary policy affects prices, output, and employment
 - 3. The Monetarist view of money ($MV=PY$)
 - 4. A comparison of views: Monetarist, Keynesian and classical economists

Topic VI: The Phillips Curve and Expectations Theory

- A. What Is the Phillips Curve?
 - 1. In the short run
 - 2. In the long run
- B. Rational Expectations Theory
 - 1. Can it work?

Unit 4: Economic Growth and Productivity (1 week) [CR3]

Topic I: Raising Productivity: Real Output and Capital Formation [CR6]

- A. Human Capital Formation
- B. Physical Capital Accumulation
- C. Research and Development, Technological Progress
- D. Public Policy and Long-Run Economic Growth

Unit 5: The International Economy (3 weeks)

Topic I: International Trade and Finance [CR7]

- A. Why Nations Trade at All
- B. Comparative and Absolute Advantage
- C. Free Trade Versus Protectionism
 - 1. Arguments for free trade
 - 2. Arguments against free trade

CR3—The course provides instruction in national income and price determination.

CR6—The course provides instruction in economic growth and productivity.

CR7—The course provides instruction in the open economy (international trade and finance).

- D. The Balance of Payments
 - 1. Current account
 - 2. Capital account
 - 3. International debt of the United States

- E. Exchange Rates
 - 1. Supply and demand for foreign exchange
 - 2. Current fluctuations
 - a. appreciation and depreciation
 - b. graphing currency changes

Topic II: Comparative Economic Systems [CR8]

- A. Basic Types of Economic Systems
 - 1. Traditional, command, and market economies — defined and analyzed
 - 2. The mixed economy of today
 - 3. Capitalism and socialism: basic tenets
 - 4. Comparing the systems

- B. Comparing Developed and Developing Countries
 - 1. Classifying countries by GDP per capita
 - a. problems with classification
 - 2. How to sustain economic growth in developing countries
 - a. national resources
 - b. policy making
 - 3. Implications for a changing world

CR8—The course promotes the understanding of aggregate economic activity; the utilization of resources within and across countries; and the critical evaluation of determinants of economic progress and economic decisions made by policy makers.

Projects

Homework

Homework assignments will vary from basic worksheets to analytical papers.

Group Research Project

Student groups of three or four will complete an economics research project of significance and present their findings in two ways: 1) a written paper 8 to 10 pages in length and 2) an oral presentation to a panel composed of graduate students, professors, community members, and me. The student groupings will be student determined with my having the authority to add one member to a group (to solve that odd-man-out problem). The use of groups will allow for specialization, division of labor, and team building. There is a possibility of having a management professor or graduate student from a nearby university serve as a mentor to assist the student research team in their design and execution of the project.

Rationale

In order to learn any subject fully, students need to use the concepts in a project. For example, no one becomes a mechanic from merely studying manuals. The prospective mechanic must get his or her hands dirty tearing down and rebuilding an engine. In the case of economics, the concepts are understood only when they are used in a project that has importance and meaning to the student. The value of the project will depend on the intensity of student commitment to the process.

Basic Content

The research project will involve:

- Project design
- Literature search
- Research design
- Actual research
 - concepts from published literature
 - survey design/construction
 - interviews
 - local resources
- Explicit statement of economic concepts involved in the project
- Demonstration of learning beyond the classroom and the textbook

Research Paper

The group will be responsible for writing a paper that describes the project. This paper will be 8 to 10 pages and will do the following:

- Define the problem
- Discuss some of the alternative views
- Advocate for one view
- Use appropriate data where available
- Use appropriate statistical techniques where necessary
- Contain an appendix, which includes the statistical information
- Use appropriate tables, charts, and graphs in the body of the paper **[CR9]**

<p>CR9—Evidence of Curricular Requirement: The course teaches how to generate, interpret, label, and analyze graphs, charts, and data to describe and explain economic concepts.</p>

- Be typed on a typewriter or word processor
- Have footnotes/endnotes and an annotated bibliography

This research paper is worth 500 points. A detailed rubric will be furnished.

Presentation

The group will also its their findings to a panel of evaluators (probably in the week after Christmas break). The presentation will be 15 to 20 minutes in length and will allow 10 minutes for questions from the panel. The presentation will be scored according to a carefully refined rubric and will answer the following questions:

- Does the project represent a significant economic question?
- Is the research appropriate and complete?
- Is there strong economic content in the presentation?
- Are the economic conclusions correct?
- Did all members of the group participate in a meaningful fashion?
- Did the group use appropriate technology (i.e., overheads, posters, computer modeling)?
- Did the group handle the questions of the panel well?

The presentation itself is worth 300 points. A detailed rubric will be furnished. Of course, there are many steps before any presentation or research paper is finished. Groups will be scored on a number of preliminary steps for the project. All these steps must be completed.

A **Culmination Simulation** will occur near the end of the semester. It involves a computer-based simulation in which groups of students attempt to manage the economy by controlling monetary and fiscal policy in competition with other groups of students. After completing the activity, students will answer a series of questions about their management of their macroeconomy.