

ECONOMICS

An Introduction to Economics and the Economics of the Water

- I. FUNDAMENTAL ECONOMIC CONCEPTS 10%
 - A. Basic Assumptions of Economics
 - 1. Scarcity
 - 2. Trade-offs
 - 3. Opportunity Cost
 - 4. Rationality
 - 5. Gains from Trade
 - B. Models and Economic Theory
 - C. Positive and Normative Economics
 - D. Efficiency as a Goal
 - E. Microeconomics and Macroeconomics

- II. MICROECONOMICS 40%
 - A. Perfectly Competitive Markets
 - 1. Markets
 - 2. Demand
 - 3. Shifts in the Demand Curve
 - a. Income
 - b. The Prices of Related Goods
 - c. Tastes
 - d. Expectations
 - e. Number of Buyers
 - 4. Supply
 - 5. Shifts in the Supply Curve
 - a. Input Prices
 - b. Technology
 - c. Expectations
 - d. Number of Sellers
 - 6. Equilibrium
 - 7. The Characteristics of Competitive Market Equilibrium
 - B. Applications of the Competitive Market Model
 - 1. Changes in Market Equilibrium
 - 2. Elasticity
 - 3. Using Elasticity
 - C. Evaluating Government Policy: The Impact of Price Controls and Taxes
 - 1. Price Controls
 - 2. Taxes
 - D. International Trade
 - 1. An Isolated Economy
 - 2. Adding the Opportunity to Trade
 - 3. Comparative Advantage and the Gains from Trade
 - 4. The Political Economy of Trade

- E. The Profit Motive and the Behavior of Firms
 - 1. Economic Profits and Accounting Profits
 - 2. Finding the Firm's Supply Curve
 - 3. Entry, Exit, and the Market Supply Curve
- F. Imperfect Competition
 - 1. Monopoly
 - 2. Monopoly Supply
 - 3. Welfare Consequences of Monopoly
 - 4. Dealing with Monopolies
 - 5. Price Discrimination
 - 6. Oligopoly
 - 7. Monopolistic Competition
- G. Creative Destruction: The Profit Motive and the Sources of Economic Change
- H. Market Failures
 - 1. Externalities
 - 2. The Effect of Externalities on Resource Allocation
 - 3. Private Responses to Externalities
 - 4. Government Regulation of Externalities
 - 5. Property Rights
 - 6. The Effects of Private Ownership
 - 7. Public and Private Goods
 - a. Private Goods
 - b. Common Resources
 - c. Collective Goods
 - d. Public Goods
- I. Institutions, Organizations, and Government
 - 1. Pork Barrel Politics
 - 2. Rent-Seeking
 - 3. What Is the Proper Role for Government?

III. MACROECONOMICS

30%

- A. Macroeconomic Issues
 - 1. Economic Growth and Living Standards
 - 2. Recessions and Expansions
 - 3. Unemployment
 - 4. Inflation
 - 5. International Trade
- B. Macroeconomic Measurement
 - 1. Measuring Total Output: Gross Domestic Product
 - a. Market Value
 - b. Final Goods and Services
 - c. Within a Country
 - d. During a Specified Period
 - 2. Understanding What GDP Measures
 - 3. Other Ways to Measure GDP: Expenditures Equal Production
 - 4. Yet Another Way to Measure GDP: Income Equals Production Equals

- Expenditures
- 5. Real GDP
- 6. Measuring Inflation
- 7. Unemployment
 - a. Frictional Unemployment
 - b. Structural Unemployment
 - c. Cyclical Unemployment
- C. Economic Growth, Productivity, and Living Standards
 - 1. The Circular Flow Model of the Economy
 - 2. What Determines How Much an Economy Produces?
- D. Savings, Investment, and the Financial System
 - 1. Financial Markets
 - a. The Bond Market
 - b. The Stock Market
 - 2. Financial Intermediaries
 - a. Banks
 - b. Mutual Funds
 - 3. Saving and Investment in Aggregate
 - 4. International Capital Flows in an Open Economy
 - 5. How Financial Markets Coordinate Saving and Investment Decisions
- E. Money and Prices in the Long Run
 - 1. What Is Money?
 - 2. Measuring Money
 - 3. The Federal Reserve System, Banks, and the Supply of Money
 - 4. Bank Runs
 - 5. Money and Inflation in the Long Run
 - 6. Why Worry about Inflation?
- F. Short-Run Economic Fluctuations
 - 1. Characteristics of Short-Run Fluctuations
 - 2. Potential Output, the Output Gap, and the Natural Rate of Unemployment
 - 3. Explaining Short-Run Fluctuations in Output
 - 4. The Aggregate Demand Curve
 - a. Wealth Effects
 - b. Interest Rate Effects
 - c. Foreign Exchange Effects
 - 5. The Aggregate Supply Curve
 - 6. The Keynesian Model of Short-Run Fluctuations
 - 7. Inflation in the Keynesian Model
 - 8. Using Fiscal and Monetary Policy to Stabilize the Economy

IV. THE ECONOMICS OF WATER

20%

- A. The Basics
 - 1. Users
 - 2. Water Sources
 - 3. Water Quantity
 - 4. Water Quality

- 5. Case Study: China's South-North Water Transfer Project
- B. Supply and Demand
 - 1. Water Supply
 - 2. Water Pricing
 - 3. Consumer Water Demand
 - 4. Case Study: Pumping and Subsidies in India
- C. Water and Agriculture
 - 1. The History of Irrigation
 - 2. Irrigation Organizations
 - 3. Case Study: The Value of Irrigation in the United States
 - 4. Water Conservation
- D. Water Property Rights
 - 1. Water Law
 - 2. Riparian Doctrine
 - 3. Prior Appropriation
 - 4. Case Study: Saline Lake Depletion
 - 5. Groundwater Rights
- E. Water Quantity Markets
 - 1. Basics
 - 2. Water Transfers
 - 3. Environmental Transfers
 - 4. Case Study: Extreme Water Scarcity in Chile
- F. Water Pollution
 - 1. Externalities and Water Quality
 - 2. Case Study: Cleaning Up Coal Ash
 - 3. Water Quality Regulation
 - 4. The Clean Water Act
 - 5. Case Study: Invasive Species in the Great Lakes
- G. Drinking Water
 - 1. Access to Drinking Water
 - 2. Case Study: The Flint Water Crisis
- H. Water Quality Markets
 - 1. Market Instruments
 - 2. Water Quality Trading in Practice
 - 3. Case Study: North Carolina