

## **Principles of Microeconomics V2 | Table of Contents**

### **Chapter 1: Welcome to Economics!**

#### 1.1 What is Economics and Why is it Important?

- Evaluate the significance of scarcity (4)
- Explain the relationship between production and division of labor (5)
- Contrast microeconomics and macroeconomics (5)

#### 1.2 Economic Theories, Models, and Systems

- Explain the importance of economic theories and models (4)
- Interpret a circular flow diagram (5)
- Contrast traditional economies, command economies, and market economies (5)
- Assess the importance and effects of globalization (4)

### **Chapter 2: Choice in a World of Scarcity**

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- Interpret budget constraints (5)

#### 2.2 The Production Possibilities Frontier and Social Choices

- Define production possibilities frontier (5)
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- Define productive efficiency and allocative efficiency (5)
- Define comparative advantage (5)

#### 2.3 Confronting Objections to the Economic Approach

- Recall arguments against economic approaches to decision-making (4)
- Classify normative statements and positive statements (4)

### **Chapter 3: Introduction to Demand and Supply**

#### 3.1 Demand, Supply, and Equilibrium in Markets for Goods and Services

- Explain demand, quantity demanded, and the law of demand (5)
- Interpret demand schedules and demand curves (5)
- Explain supply, quantity supplied, and the law of supply (4)
- Interpret supply schedules and supply curves (5)
- Define equilibrium (5)
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- Identify equilibrium using demand/supply schedules (40)
- Explain how a market moves from shortage or surplus to an equilibrium (5)

#### 3.2 Shifts in Demand and Supply for Goods and Services

- Define the ceteris paribus assumption (4)
  - Contrast normal and inferior goods (4)
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- Identify the effects of income on shifts in demand (5)
- Explain how changes in price of substitute goods can affect demand (4)
- Explain how changes in price of complement goods can affect demand (4)
- Identify factors that shift demand curves (4)
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- Identify factors that shift supply curves (4)
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- Graph shifts in supply (10)

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- Explain price floors (4)
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- Analyze the effects of price ceilings on market equilibrium (40, 3)

### 3.5 Demand, Supply, and Efficiency

- Define Consumer Surplus (5)
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- Explain why taxes on buyers and sellers can be inefficient (4)

## **Chapter 4: Labor and Financial Markets**

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- Define price elasticity (5)
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- Define and identify polar cases of elasticity (5)
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- Explain the relationship between changes in price and total revenue based on the elasticity of demand (5)
- Explain the relationship between shifts in supply and changes in equilibrium price based on the elasticity of demand (4)
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- Explain the long-run and short-run impacts of elasticity (4)

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- Define income elasticity of demand (4)
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- Calculate cross-price elasticity of demand (40)
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- Calculate marginal utility (40)
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- Use marginal utility to understand how consumers make utility maximizing decisions (40)
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**6.2 Consumption Choices and Behavioral Economics**

- Understand how changing income affects a consumer's utility maximizing choice of goods (5)
- Understand how changing prices affect a consumer's utility maximizing choice of goods (5)
- Understand how to draw a demand curve based on consumer reactions to price changes (10)
- Define and understand basic concepts in behavioral economics (4)

**Chapter 7: Production, Costs, and Industry Structure****7.1 Explicit and Implicit Costs, and Accounting and Economic Profit**

- Understand the concept of the firm and production (5)
- Understand revenue, cost, and profits (5)
- Use revenue and cost information to calculate accounting and economic profit (40)

**7.2 Production in the Short Run**

- Understand the factors of production and be able to group factors into one of five categories (5)
  - Understand and differentiate between fixed and variable inputs in production (4)
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- Calculate marginal product and understand the law of diminishing marginal product (40)

### 7.3 Costs in the Short Run

- Identify the factor payments associated with the five factors of production (5)
- Calculate cost from a production function (40)
- Use a cost function to calculate marginal and average costs (40)
- Understand fixed, variable, and total costs of production (4)
- Use fixed and variable costs to calculate average variable, average fixed, and average total costs (40)
- Identify average total cost, average variable cost, and marginal cost on a graph (4)
- Define average profit and profit margin (5)

### 7.4 Costs in the Long Run

- Understand the relationship between labor and machinery prices and firm production decisions (4)
- Recognize when an average cost curve exhibits economics of scale (5)
- Understand the long run average cost curve and identify the economies of scale and constant returns to scale zones (5)
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## **Chapter 8: Perfect Competition**

### 8.1 How Perfectly Competitive Firms Make Output Decisions

- Understand market structure and the characteristics of a perfectly competitive industry (5)
- Understand two different formulas for calculating profit (40)
- Use a graph or table to determine the profit-maximizing level of output based on total revenue and total cost (10)
- Use total revenue to calculate marginal revenue in perfect competition (40)
- Find the profit-maximizing level of output using marginal revenue and marginal cost (40)
- Understand profit margin and identify profit on a graph (5)
- Use price and average total cost to calculate profit (40)
- Understand the firm's short run production decision and identify the short run supply curve (5)

### 8.2 Entry and Exit in the Long Run and Efficiency in Perfectly Competitive Markets

- Understand why firms enter or exit a competitive industry (4)
- Understand how a competitive industry arrives at the long run equilibrium (5)
- Understand the cost structure of a competitive industry and identify long run industry supply on a graph (5)
- Understand efficiency and how it relates to perfect competition (5)

## **Chapter 9: Monopoly**

### 9.1 How Monopolies Form: Barriers to Entry

- Understand monopoly and barriers to entry (5)
  - Understand how natural monopolies arise and identify them graphically (5)
  - Understand control of a physical resource, legal restrictions, intellectual property, and predatory pricing as sources of barriers to entry (4)
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## 9.2 How a Profit-Maximizing Monopoly Chooses Output and Price

- Differentiate between demand facing a perfectly competitive firm and a monopolist (4)
- Use total revenue to calculate marginal revenue for a monopolist (40)
- Use marginal revenue and marginal cost to find the profit maximizing quantity and calculate profits (40)
- Identify monopoly profits on a graph and determine the monopolist's price (10)
- Understand allocative efficiency in a monopoly (5)

## **Chapter 10: Monopolistic Competition and Oligopoly**

### 10.1 Introduction to Monopolistic Competition and Oligopoly

- Remember the characteristics of monopolistic competition and oligopoly (5)
- Identify examples of product differentiation (5)
- Understand demand as perceived by a monopolistically competitive firm (4)
- Use a graph or table to determine the monopolistic competitor's outcome (40)
- Use a graph or table to determine the monopolistic competitor's profit (40)
- Illustrate the transition to the long run in monopolistic competition when firms make short run profits (10)
- Illustrate the transition to the long run in monopolistic competition when firms suffer short run losses (10)
- Understand efficiency in monopolistic competition (4)
- Understand the benefits of product differentiation and how advertising affects monopolistic competition (4)

### 10.2 Oligopoly

- Understand how oligopolies form and how they could work together in production decisions (5)
- Understand game theory and the prisoner's dilemma (5)
- Understand how the prisoner's dilemma relates to oligopoly and calculate the game's outcome (5)
- Calculate the no-cooperation equilibrium in oligopoly (40)
- Explain the kinked demand curve model of oligopoly (5)

## **Chapter 11: Monopoly and Antitrust Policy**

### 11.1 Corporate Mergers

- Define mergers, acquisitions, and antitrust law (4)
- Use market shares to calculate the four-firm concentration ratio (40)
- Define and calculate the Herfindahl-Hirschman Index (40)
- Understand how the FTC uses the HHI (5)
- Understand new approaches to antitrust policy (5)

### 11.2 Regulating Anticompetitive Behavior and Natural Monopolies

- Understand restrictive practices and why regulators seek to regulate them (4)
  - Interpret a graph of regulatory choices for natural monopoly (5)
  - Understand the consequences of various regulatory choices for natural monopoly (5)
  - Understand the costs and benefits of cost-plus and price cap regulation (5)
  - Understand the effects of late 20th century deregulations in the US (5)
  - Explain regulation in the financial industry (5)
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**Chapter 12: Environmental Protection and Negative Externalities**

## 12.1 The Economics of Pollution and Command-and-Control Regulation

- Identify examples of positive and negative externalities (5)
- Graph a market with a negative externality (10)
- Identify the market and socially optimal equilibria in a market with a negative externality (5)
- Identify command-and-control regulation and understand its drawbacks (5)

## 12.2 Market-Oriented Environmental Tools

- Understand pollution charges as a market-oriented environmental tool (10)
- Understand marketable permits as a market-oriented environmental tool (39)
- Understand property rights as a solution to negative externality (5)

## 12.3 The Benefits and Costs of U.S. Environmental Laws, International Environmental Issues, and The Tradeoff Between Economic Output and Environmental Protection

- Explain the costs and benefits of the Clean Air Act and ecotourism (5)
- Use a marginal benefits-marginal costs graph to analyze regulatory choice (5)
- Understand the role of the Paris Climate Agreement in addressing international externalities (5)
- Understand the tradeoff between environmental protection and production (5)

**Chapter 13: Positive Externalities and Public Goods**

## 13.1 Why the Private Sector Underinvests in Innovation and How Governments Can Encourage Innovation

- Understand private and social benefits and illustrate them graphically (10)
- Understand the positive externalities of education (5)
- Understand how subsidies can be a solution to positive externalities and illustrate this graphically (10)
- Define intellectual property rights and understand why they are not always effective for promoting innovation (5)
- Understand alternative government policies for promoting research and development (5)

## 13.2 Public Goods

- Identify goods that are non-rival and non-excludable as public goods (5)
- Understand the free rider problem and why it leads government to provide some public goods (5)
- Understand common resources and the tragedy of the commons (5)
- Explain how public health programs create positive externalities (5)

**Chapter 14: Labor Markets and Income**

## 14.1 The Theory of Labor Markets

- Calculate and graph the marginal product of labor (40)
- Calculate the value of marginal product of labor and plot it on a graph (10)
- Understand how firms in competitive labor markets choose how many workers to hire (10)
- Calculate and graph marginal revenue product in imperfectly competitive output markets (10)
- Understand how imperfectly competitive firms choose how much labor to employ (10)
- Understand equilibrium wage and employment in a labor market (5)

## 14.2 Wages and Employment in an Imperfectly Competitive Labor Market

- Understand why workers receive protection from labor laws and identify examples of such protections (5)
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- Define monopsony power (5)
- Calculate and graph marginal cost of labor for a monopsony firm (10)
- Use a graph to identify a monopsony firm's level of employment and wage (10)
- Use a graph to identify differences between the outcome in a competitive labor market and a monopsony labor market (5)

#### 14.3 Market Power on the Supply Side of Markets and Bilateral Monopoly

- Define unions and remember basic facts about union membership in the US (5)
- Understand how unions can affect wages (5)
- Explain the tradeoff between wages and employment and understand the potential impacts of unions on worker productivity (5)
- Understand possible explanations for the decline in union membership in the US (5)
- Understand how bilateral monopoly affects employment and wages in labor markets (5)

#### 14.4 Employment Discrimination and Immigration

- Define discrimination and understand trends in wage ratios over the past 50 years (5)
- Understand factors that affect female-male wage ratios (5)
- Understand factors that affect black-white wage ratios (5)
- Understand how competitive markets, the government, and growing diversity can help reduce discrimination (5)
- Understand the costs and benefits, historical trends, and policy regarding immigration (5)

### **Chapter 15: Poverty and Economic Inequality**

#### 15.1 The Poverty Line and The Poverty Trap

- Define basic definitions related to poverty (5)
- Identify patterns of inequality in the US and abroad (5)
- Explain the poverty trap and use a labor-leisure budget constraint to illustrate this scenario (10)
- Explain how a guaranteed income program discourages work (5)
- Use a labor-leisure budget constraint to draw a guaranteed income program with a phase-out (10)
- Use a graph to show how a guaranteed income program with phase-out provides a greater incentive to work (5)

#### 15.2 The Safety Net and Income Inequality

- Explain the government programs of the Temporary Assistance for Needy Families and the Earned Income Tax Credit (5)
- Explain the Supplemental Nutrition Assistance Program and Medicaid (5)
- Describe the US income distribution using income quintiles (5)
- Use a quintile income distribution to calculate and graph a Lorenz curve (10)
- Explain how a Lorenz curve measures inequality (5)
- Understand how income inequality has been affected by household composition and labor demand (5)

#### 15.3 Government Policies to Reduce Inequality

- Define redistribution, progressive tax, effective income tax (4)
  - Explain the ladder of opportunity and estate tax (5)
  - Use a production possibilities frontier to illustrate the tradeoff between incentives and income inequality (5)
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**Chapter 16: Information, Risk, and Insurance****16.1 The Problem of Imperfect Information and Asymmetric Information**

- Explain asymmetric and imperfect information and how the "lemons" problem can arise (5)
- Explain how markets with imperfect information will have trouble reaching an equilibrium price (5)
- Explain how money-back guarantees, warranties, and service contracts reduce the risk of imperfect information (5)
- Explain how occupational licenses, cosigners, and collateral reduce the risk of imperfect information (5)

**16.2 Insurance and Imperfect Information**

- Calculate actuarial fair premiums (40)
- Identify the government social insurance programs in the US (5)
- Understand risk groups and their effect on premiums (40)
- Understand moral hazard and what insurance companies can do to present it (5)
- Define adverse selection and describe how this can be a problem for insurers (5)
- Explain U.S. healthcare in an international context (5)
- Understand the role for government in insurance markets (5)
- Understand the Patient Protection and Affordable Care Act (5)

**Chapter 17: Introduction to Financial Markets****17.1 How Businesses Raise Financial Capital**

- Explain financial markets and understand venture capital and profits as source of financial capital (5)
- Understand bonds and explain the benefits and costs of bonds relative to bank loans (5, 5)
- Explain how corporations raise money and give investors a return on investment (5)
- Define private and public companies (5)
- Explain how firms go about deciding which source of financial capital to use (5)

**17.2 How Households Supply Financial Capital**

- Define liquidity, risk, and rate of return (5)
- Understand banks as financial intermediaries and explain the ways households use banks (5, 5)
- Understand how bond interest rates vary with risk and maturity rate (5)
- Define important bond terminology (5)
- Calculate a bond's yield rate (40)
- Understand the major US stock indexes (4)
- Define diversification, mutual funds, and index funds (4)
- Calculate real estate equity (40)
- Understand the housing bubble (4)
- Understand the tradeoff between risk and return (4)

**17.3 How to Accumulate Personal Wealth**

- Explain Random Walk Theory (4)
  - Calculate simple interest (40)
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**Chapter 18: Public Economy****18.1 Voter Participation and Costs of Elections, Special Interest Politics, Flaws in the Democratic System of Government**

- Understand why people do and don't vote in political elections (4)
- Evaluate the impact of election expenses (4)
- Understand how lobbyists can help enact the interests of a minority (40)
- Explain pork-barrel spending and logrolling (4)
- Define majority rule and understand why political outcomes may not reflect it (4)
- Identify and explain voting cycles (4)
- Understand the costs and benefits of the role of government in an economy (4)

**Chapter 19: International Trade****19.1 Absolute and Comparative Advantage**

- Explain comparative advantage and determine which country has an absolute advantage in producing a good (5, 5)
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- Calculate a country's opportunity cost of producing one unit of a good and use this to determine comparative advantage (10)
- Explain the relationship between comparative advantage and specialize and calculate world production before and after specialization (10)
- Illustrate how trade can move a country beyond its production possibilities frontier (10)

**19.2 Absolute Advantage, Intra-Industry Trade Between Similar Economies, and Reducing the Barriers to International Trade**

- Relate absolute advantage and labor productivity and calculate the increase in world output due to specialization even if one country has both absolute advantages (10)
- Illustrate gains from trade when one country has an absolute advantage in both goods (10)
- Explain why comparative advantage increases production for all countries (5)
- Define and explain intra-industry trade (4)
- Explain the World Trade Organization and understand the benefits to reducing trade barriers (4)

**Chapter 20: Globalization and Protectionism****20.1 Protectionism: An Indirect Subsidy from Consumers to Producers**

- Explain protectionism, GATT, and WTO (4)
- Identify equilibrium prices for a good in two countries with and without trade (10)
- Calculate exports and imports using supply and demand diagrams (10)
- Identify gains from trade on a supply and demand diagram (5)
- Use a supply and demand diagram to illustrate the impact of imports and identify the impact on domestic market price (10)
- Explain who benefits and who loses from protectionism (5)

**20.2 The Effects of International Trade and Arguments in Favor of Restricting Imports**

- Explain how protectionism and trade affect jobs, wages, and working conditions (4)
  - Explain the infant industry argument and dumping (4)
  - Explain the environmental protection argument, the unsafe consumer products argument, and the national interest argument (4)
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### 20.3 How Governments Enact Trade Policy and The Tradeoffs of Trade Policy

- Explain The main objective of the WTO/GATT and understand regional trade agreements (5)
- Explain the relationship between free trade and domestic interests and how trade policy has evolved over time (4)
- Explain why free trade should be a first priority for policymakers (4)

## **Appendix**

### Indifference Curves

- Draw an indifference curve (10)
- Interpret an indifference curve and explain its slope (5)
- Explain why higher indifference curves are preferred to lower ones and how indifference curves differ across individuals (4)
- Understand how an individual uses indifference curves and a budget line to maximize utility (5)
- Explain how changes in income affect the utility maximizing choice (4)
- Identify the income and substitution effects graphically (10)
- Draw a labor-leisure indifference curve and budget line (10)
- Explain the effect of a change in the wage on a worker's labor-leisure choice (5)
- Draw an intertemporal choice indifference curve and budget line (10)
- Explain the effect of a change in the interest rate on the choice between present and future consumption (5)
- Sketch income and substitution effects (10)

### Present Discounted Value

- Calculate present discounted value of a stock (10)
- Calculate present discounted value of a bond and understand the relationship between present value and interest rates (10)

### The Expenditure-Output Model

- Identify aggregate expenditure, the 45-degree line, and potential output on a graph (5)
  - Define MPC and MPS (4)
  - Draw a pre-tax consumption function (10)
  - Explain the investment function and government spending function (4)
  - Draw a post-tax consumption function (10)
  - Explain the exports function and draw an imports function (10)
  - Use the expenditure-output model to calculate expenditure and analyze how changing components affect expenditure (10)
  - Explain equilibrium in the Keynesian cross model (10)
  - Identify inflationary and recessionary gaps on an aggregate expenditure gap (5)
  - Calculate and explain the spending multiplier (10)
  - Use the spending multiplier to calculate the effect of an increase in spending on Real GDP (10)
-