

ADVANCED PLACEMENT MICROECONOMICS SYLLABUS

Ryan Robinson, Waterford Mott High School

TEXTBOOK

Economics; McConnell, Brue, Flynn 20e

ADDITIONAL SOURCES

The Economist

Wall Street Journal

COURSE DESCRIPTION

Advanced Placement Microeconomics is a one-semester, college-level course. Each student is expected to take the AP Microeconomics Exam that is administered in May. Successful achievement on the AP Exam allows the student to earn up to four hours of college credit.

Topics discussed will reflect the material included on the Microeconomics Course Description page of AP Central's website which is located at <http://apcentral.collegeboard.com>. Microeconomics will emphasize economic principles as applied to the individual segments of the economy. The decision-making processes of consumers, businesses and government will be analyzed in their roles as participants in a market economy.

Expectations for Personal and Academic Conduct

1. You will use your class time to engage in matters that deal with, and only with, this class. Use of class time for completing assignments in other classes, napping, texting on cell-phones, etc. will be cause for removal.
2. You MUST be prepared for class when you are present. This includes completion of required reading and assigned questions.
3. You will be given 1 class day to make-up work for any EXCUSED ABSENCE. Make-up tests and quizzes must be completed within 1 weeks of their assigned dates.
4. You will do your own work! If, for any reason, the instructor believes a student has copied or plagiarized work ("academic misconduct") a meeting will be held with the principal and your parents to discuss the situation and administer consequences.
5. You understand that this is a freshman college-level class and will take responsibility for your own learning. Blaming someone else for "not getting it" is NOT an academically mature option.

Microeconomics Unit One: Basic Economic Concepts

2.5 weeks

I. Basic Economic Concepts

- A. Scarcity, Choice and Opportunity Cost
- B. Production Possibilities Curve
- C. Comparative Advantage, Absolute Advantage, Specialization and Trade
- D. Economic Systems
- E. Property Rights and the Role of Incentives
- F. Marginal Analysis
- G. Market Failures: Public Goods and Externalities
- H. Government's role

List of key concepts and graphs

Concepts: Introduction to the language of economics, micro vs macro, positive vs. normative economics, economic decision making, pitfalls of decision making, scarcity, opportunity costs, production possibilities, absolute advantage, comparative advantage, specialization, terms of trade, market, command and mixed economic systems, questions each economic system must answer, property rights and the role of incentives, marginal decision making, economic efficiency using marginal analysis.

Graphs: Production possibilities curve (frontier)
Circular flow of economic activity

Web References

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html
<http://welkerswikinomics.com>
<http://reffonomics.com>

Videos

Economics USA

1. Resources and scarcity
2. Markets: Do they serve our needs?

“Free to Choose” - first segment, first half hour (discussion of the market economy)

Simulation Games

Resource Scarcity Game

Activities

John Morton, Advanced Placement Economics, Activities 1-8

Time-line for Unit

Day Class Activity

- 1 Introduction to the economics way of thinking. Discussion of scarcity, opportunity costs/
- 2 Resource Scarcity Game. Production Possibilities
- 3-4 Absolute and Comparative Advantage, terms of trade
- 5 Show segment of Free to Choose, types of economic systems, questions each system must answer, circular flow of economic activity
- 6 Private property and the role of incentives. Marginal analysis, economic efficiency
- 7 Finish material/study guide discussion
- 8 Unit I Test

Microeconomics Unit Two: The Nature and Functions of Product Markets

10 weeks

II. The Nature and Function of Product Markets

- A. Supply and Demand
 1. Market Equilibrium
 2. Determinants of supply and demand
 3. Price and quantity controls
 4. Elasticity
 - a. Price, income and cross-price elasticities of demand
 - b. Price elasticity of supply
 5. Consumer surplus, producer surplus, and market efficiency
 6. Tax incidence and deadweight loss

List of key concepts and graphs

Concepts: demand schedule, determinants of demand, individual and market demand curves, supply schedule, determinants of supply, market equilibrium, shifts in supply and demand with effects on equilibrium price and quantity, shortages, surpluses, ceilings and floors, price elasticity, characteristics of products with elastic/inelastic demand, total revenue formula, price elasticity using midpoint formula, income and cross-price elasticities, elasticity of supply,

consumer surplus, producer surplus, market efficiency, taxation and who bears the burden as determined by elasticities of demand and supply, deadweight loss.

Graphs:

- Demand and supply curves showing equilibrium, shifts of demand/supply
- Demand and supply curves showing ceilings and floors
- Demand and supply curves showing consumer surplus/producer surplus
- Demand and supply curves showing deadweight loss

List of key words or terms

Demand, law of demand, quantity demanded, market demand, substitutes, complements, normal goods, inferior goods, supply, law of supply, quantity supplied, market equilibrium, equilibrium price, equilibrium quantity, shortage, surplus, price ceiling, price floor, elastic, inelastic, unit elastic, perfectly elastic, perfectly inelastic, total revenue, income elasticity of demand, cross-price elasticity of demand, elasticity of supply, consumer surplus, producer surplus, total economic surplus, market efficiency, taxation, tax incidence, deadweight loss.

Web resources

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html
<http://welkerswikinomics.com>
<http://reffonomics.com>

Videos

Economics USA Video Demand and Supply: What sets the price

Simulation games

A market in Wheat - John Morton's Teacher's Manual AP Economics, Second Edition.

Activities

Advanced Placement Economics, Third Edition 2003 (National Council for Economic Education), Activities 9-23

David A. Anderson and James Chasey, Favorite Ways to Learn Economics, Chapters 2 and 3 activities

Time-line for Unit

Day Class Activity

- 1 Activity-Market in Wheat. Discussion on the nature of demand, determinants of demand
- 2 **Quiz** on demand determinants. Discuss supply/equilibrium
- 3 Shifts of demand and supply, effect on price and quantity. Ceilings and floors

- 4 Elasticity - Total Revenue Test and Elasticity Coefficient
- 5 Elasticity Activities
- 6 Consumer/producer surplus/deadweight loss
- 7 Final discussion/activities
- 8 **Test** on Supply and Demand

The Nature and Function of Product Markets...continued

B. Theory of Consumer Choice

1. Total utility and marginal utility
2. Utility maximization: equalizing marginal utility per dollar
3. Individual and market demand curves
4. Income and substitution effects

List of key concepts and graphs

Concepts: The law of diminishing marginal utility, marginal utility vs. total utility, equalizing marginal utility per dollar for two or more products, the derivation of the demand curve, horizontal summation of individual demand curves to achieve market demand curve, income effect and the demand curve, the substitution effect and the demand curve.

Graphs: Demand Curve

List of key words and terms

Key Words: Marginal utility, total utility, $MU_a/P_a = MU_b/P_b$, individual demand curve, market demand curve, horizontal summation, substitution effect, income effect

Web Resources

<http://glencoe.mheducation.com/sites/0021403236/index.html>

<http://welderswikinomics.com>

<http://reffonomics.com>

Simulation game

Donut eating activity to measure marginal utility and total utility

Activities

David Anderson and James Chasey, Favorite Ways to Learn Economics, Chapter 7

Timeline for Unit

Day Class Activity

- 1 Marginal and total utility/class activity using donuts or other food production. Utility maximization with two or ore products
- 2 Exercises on consumer utility
- 3 Individual an market demand curves/income and substitution effects
- 4 **Quiz**

The Nature and Function of Product Markets...continued

C. Production and costs

1. Production functions: short and long run
2. Marginal product and diminishing returns
3. Short-run costs
4. Long-run costs and economies of scale
5. Cost minimizing input combination

List of key concepts and graphs

Concepts: Long-run and short run characteristics, law of diminishing marginal returns, relationship between marginal and average product, costs of production in the short run, relationship between short run production and costs, appearance of the various cost curves, cost minimizing input combination

Graphs:

- Marginal product - identify ranges of increasing, decreasing, and negative returns
- Marginal and average product curves on the same graph
- Total fixed cost, total variable cost, and total cost on the same graph
- Average fixed cost, average variable cost, average total cost, adn marginal cost on the same graph
- Long-run average total cost curve with three ranges

List of key words and terms

Key words: Total product, marginal product, average product, short run, long run, fixed costs, variable costs, total costs, marginal costs, average fixed costs (AFC), average variable costs (AVC), average total costs (ATC), economies of scale, constant returns to scale, diseconomies of scale, minimum efficient scale.

Web Resources

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html

<http://welkerswikinomics.com>

<http://reffonomics.com>

Simulation games

Production activity using fixed and variable units to produce a product - see website activities

Activities

Advanced Placement Economics, Third Edition, 2003, (National Council on Economic Education Activities 25-26.

David Anderson and James Chasey, Favorite Ways to Learn Economics, Chapter 5 activities

Timeline for Unit

Day Class Activity

- | | |
|---|---|
| 1 | Production activity, Production and costs |
| 2 | Costs, graphs |
| 3 | Long-run ATC |
| 4 | Quiz |

The Nature and Function of Product Markets...continued

D. Firm Behavior and Market Structure

1. Profit:
 - a. Accounting vs. economic profits
 - b. Normal profit
 - c. Profit maximization: $MR=MC$ rule
2. Perfect competition
 - a. Profit maximization
 - b. short-run supply and shutdown decision
 - c. Behavior of firms and markets in the short run and in the long run
 - d. Efficiency and perfect competition
3. Monopoly
 - a. Sources of market power
 - b. Profit maximization
 - c. Inefficiency of monopoly
 - d. Price discrimination
 - e. Natural monopoly
4. Oligopoly
 - a. Interdependence, collusion, and cartels
 - b. Game theory and strategic behavior
5. Monopolistic competition
 - a. Product differentiation and role of advertising
 - b. Profit maximization

- c. Short-run and long-run equilibrium
- d. Excess capacity and inefficiency

List of key concepts and graphs

Concepts: economic costs, determination of total revenue, types of profit, profit maximization rule

PERFECT COMPETITION: characteristics of perfect competition, industry vs. firm's demand curve, profit maximization (loss minimization) in the short run, short-run supply and shutdown decision, changes in supply/demand and the effects in short and long run, long run supply curve, efficiency.

MONOPOLY: characteristics of monopoly, appearance of the demand curve and marginal revenue curve, profit maximizing output and price, price discrimination, natural monopolies and price strategies, anti-trust legislation.

MONOPOLISTIC COMPETITION: characteristics of monopolistic competition, profit maximization, short-run vs. long-run output, price, profit.

OLIGOPOLY: characteristics of oligopoly, game theory model, strategic decision-making.

Graphs:

- Perfectly competitive side-by-side industry and firm graphs
- Perfectly competitive firm with short-run profits
- Perfectly competitive firm with short-run losses
- Perfectly competitive side-by-side industry and firm graphs in long-run equilibrium
- Monopoly firm graph with profit maximizing price and quantity
- Monopoly firm graph with socially optimal or fair return price
- Monopolistically competitive firm in the short-run
- Monopolistically competitive firm in the long-run

List of key words and terms

Implicit costs, explicit costs, economic costs, economic profit, normal profit

PERFECT COMPETITION: price taker, total revenue, average revenue, marginal revenue, profit maximization at $MR=MC$, shutdown, short-run supply, long-run supply, decreasing cost industries, constant cost industries, increasing cost industries, allocative efficiency, productive efficiency.

MONOPOLY: price searcher, barriers to entry, patent, rent-seeking behavior, price discrimination, natural monopoly, socially optimal price, fair return price.

MONOPOLISTIC COMPETITION: product differentiation, excess capacity.

OLIGOPOLY: cartels, collusion, Herfindahl Index, concentration ratio, prisoner's dilemma, price leadership model

Web Resources

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html

<http://welkerswikinomics.com>

<http://refonomics.com>

<http://www.ncee.net>

Simulation games

Game theory activities, Margaret Ray

Activities

Advanced Placement Economics, Third Edition, 2003, National Council on Economic Education, Activities 27-42

David Anderson and James Chasey, Favorite Ways to Learn Economics, Chapter 5

Timeline for Unit

Day Class Activity

- 1 Economic costs, economic profits and normal profits, marginal revenue, average revenue, total revenue
- 2 Market structures - perfect competition, profit maximization for perfect competition
- 3 Side-by-side graphs for industry and firm
- 4 Short-run adjustments, long-run adjustments
- 5 Short-run supply curve, long-run supply curve
- 6 Review for **Test** on Perfect Competition
- 7 **Test** Multiple choice and free response
- 8 Market Structures - monopoly, profit-maximization price and quantity
- 9 Natural monopoly/price discrimination
- 10 Market structures - Monopolistic competition
- 11 Profit maximization, short-run adjustments, long-run equilibrium
- 12 Market structures - oligopoly, Herfindahl Index and Concentration ratio
- 13 Game Theory and Prisoner's dilemma, Game theory exercises
- 14 Review for **Test**
- 15 **Test** on monopoly, monopolistic competition, oligopoly

Microeconomics Unit Three: Factor Markets

2.5 weeks

III. Factor Markets

- A. Derived factor demand
- B. Marginal revenue product
- C. Labor market and firms' hiring of labor
- D. Market distribution of income

List of key concepts and graphs

Concepts: Circular flow of economic activity with emphasis on the factor market, derived demand, how marginal revenue product is determined, shifts in

MRP, cost minimization when using more than one resource, profit maximization when using more than one resource, supply of resources, changes in the supply of labor, profit maximization in the perfectly competitive labor market, equilibrium in a monopsony, unions and determination of wages, bilateral monopoly, determination of other factor prices.

Graphs:

- Circular flow of economic activity
- Marginal revenue product (Demand) curve
- Market's marginal revenue product and marginal resource cost (supply) curves
- Firm's marginal revenue product and marginal resource cost (supply) curves
- Side-by-side perfectly competitive market and firm graphs
- Monopsony

List of key words or terms

Key words: Factor market, product market, input, resource, derived demand, marginal (physical) product of labor (MPL), productivity, value of the marginal product, marginal revenue product, marginal resource cost, wage taker, substitution effect, output monopsony, unions, bilateral monopoly, nominal wage, real wage, economics rent, interest rate for investment funds, loanable funds market.

Web Resources

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html

<http://welkerswikinomics.com>

<http://reffonomics.com>

<http://www.ncee.net>

Simulation games

David Anderson and James Chasey, Favorite Ways to Learn Economics, Chapter 6

Activities

Advanced Placement Economics, Third Edition, 2003 (National Council on Economic Education) Activities 43-51

Timeline for Unit

Day Class Activity

- 1 Circular flow and derived demand, marginal product
- 2 Marginal revenue product
- 3 Input choice maximization or least cost
- 4 Resource supply
- 5 Market and firm side-by-side graphs
- 6 Monopsony, Unions and bilateral monopoly
- 7 Review
- 8 Unit **Test**

Microeconomics Unit Four: Market Failure and the Role of Government

2.5 weeks

IV. Market Failure and the Role of Government

- A. Externalities
 - 1. Marginal social benefit and marginal social cost
 - 2. Positive Externalities
 - 3. Negative Externalities
 - 4. Remedies
- B. Public Goods
 - 1. Public vs. private goods
 - 2. Provision of Public goods
- C. Public policy to promote competition
 - 1. Antitrust policy
 - 2. Regulation
- D. Income distribution
 - 1. Equity
 - 2. Sources of income inequality

List of key concepts and graphs

Concepts: Market failure when marginal social benefit does not equal marginal social cost, recognizing socially optimal price/quantity, positive externalities and remedies to equate MSB and MSC, negative externalities and remedies to equate MSB and MSC, characteristics of public and private goods, various types of taxes, tax burdens, anti-trust policies, promoting competition through regulation, income distribution, issues of income inequality.

Graphs: market supply and demand curves with optimal price/quantity, market supply and demand curves with positive externality, market supply and demand curves with negative externality, Lorenz curve.

List of key words and terms

Key Words: Marginal cost-marginal benefit rule, positive externality, spillover benefit, negative externality, spillover cost, Coase theorem, tragedy of the commons, tax, subsidy, quantity control, rivalry, private goods, public goods, common resources, free rider, progressive tax, proportional tax, regressive tax, ability to pay principle, benefits received principle, average tax rate, marginal tax rate, Sherman Act of 1890, Clayton Act of 1914, horizontal merger, vertical

merger, conglomerate merger, natural monopoly, equity, Lorenz curve, Gini coefficient, poverty rate, transfer payments, non-cash transfers.

Web Resources

http://highered.mheducation.com/sites/0078021758/information_center_view0/index.html

<http://welkerswikinomics.com>

<http://reffonomics.com>

<http://www.ncee.net>

Simulation games

Tragedy of the Commons activity - Margaret Ray

David Anderson and James Chasey, Favorite Ways to Learn Economics - Tragedy of the Commons Game

Activities

Advanced Placement Economics, Third Edition, 2003, (National Council on Economic Education), activities 52-60

David Anderson and James Chasey, Favorite Ways to Learn Economics, Chapter 4

Timeline for Unit

Day Class Activity

- 1 Marginal social benefits and marginal social costs
- 2 Positive and Negative externalities
- 3 Public Goods vs. Private Goods, solutions to externality issues - public vs. private
- 4 Tragedy of the Commons
- 5 Anti-Trust Legislation
- 6 Income distribution
- 7 Review Activities
- 8 **Test** on Unit Four

Welcome to AP Micro/Macro Economics!

All of your Summer Study resources can be found on Google Classroom. I encourage you to use the posted documents which include teacher notes, practice questions with answers, and videos. You are **required** to complete the quizzes for **Chapters 1-5** by the assigned dates (you will receive credit for these toward your semester grade).

I encourage you to post resources that you come across in your exploration of Economics on OUR Google Classroom site.

Check out an AP Economics book in the Academic Center before the end of the year (you will have a difficult time completing the work without one).

Google Classroom code: **honpnq**

You **MUST** use your student Google account to access this website.

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