

AP MICROECONOMICS

Course Syllabus Fall 2017

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INTRODUCTION

Northview High School's Advanced Placement program in Microeconomics is designed to prepare students for success on the College Board AP Microeconomics Exam, to be administered on May 18, 2018, at 8:00am. The program will help students acquire/hone skills in economic reasoning, model interpretation and analysis, and develop solution-based approaches to complex problem-solving, all of which will afford students the means whereby they can provide evidence of understanding through the use of concise descriptions and explanations, and clearly labeled economic illustrations.

COURSE OBJECTIVES

The purpose of AP Microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers - both consumers and producers - within the larger economic system. Microeconomics places primary emphasis on the nature and functions of product markets, yet also includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. Students will learn the following concepts: scarcity, opportunity costs and production possibilities, specialization and comparative advantage, the functions of different economic systems, the nature and functions of product markets and factor markets, supply and demand, models of consumer choice, production decision-making, profit-maximizing decision-making, product pricing, competitive markets, markets for public goods and services, market failure, economic equity, and the role of government.

MATERIALS TO BRING TO CLASS, TEXTBOOK, AND SUPPLEMENTAL MATERIALS

In order to be fully prepared to learn, students are expected to bring the following materials to class each and every day: AP Microeconomics Crash Course (David Meyer, paperback), Computational Notebook (4X4 Quad, National Brand), 3-Ring Binder (one inch w/ pockets), mechanical pens/pencils (colored), straightedge, Chromebook, USB Drive (4+GB).

TEXTBOOK: McConnell and Brue Economics: Principles, Problems, and Policies, 16th edition. Boston: McGraw-Hill, 2005.

REVIEW BOOK: Mayer, David, AP Microeconomics Crash Course, New Jersey: Research & Education Association, 2012.

ONLINE RESOURCES: www.gorokkingecon.com, www.reffonomics.com, www.rea.com/crashcourse, www.econclassroom.com,

GRADING PROCEDURES

Students will be assessed in a variety of ways which may include, but not be limited to, homework, worksheets, quizzes, exams, daily work, notes, labs, simulations, projects, and a final exam. The breakdown of these grades will be as follows:

Summer Assignment:	~ 7%	(10 Summary Analysis of Scenarios from "The Settlers of Catan")
Notebook and Binder:	~ 10%	(homework, worksheets, activities, classwork, labs, notes, etc.)
Quizzes (15-30 minutes):	~ 20%	(concept specific; vocabulary, free response, MC, reading check, etc.)
Unit Exams (50-90 minutes):	~ 40%	(comprehensive; multiple choice and free response combined)
Final Exam (2 hours):	~ 23%	(multiple choice = ~16%; free response = ~7%)
TOTAL:	107%**	(reflects seven (7) points added average by FCBOE)

**At the end of the semester, FCBOE will add seven (7) points to a student's course average as it appears in the online gradebook, Teacher Access Center (TAC). Be aware that these 7 points will not be added to progress reports. Note that the Final Exam is weighted 23%, and remains vacant the entire semester; as such, cumulative average may appear distorted. Also note, the effect of early tasks on cumulative average will diminish over time as more tasks are added to the gradebook.

BEHAVIORAL EXPECTATIONS

Students have made a decision to enroll in a college-level class; during class, students are expected to act like college students in several respects, including behavioral maturity, academic preparation and honesty, attendance and promptness, self-respect, and respect for others. Behavior and/or language that interferes with the learning or performance of others and/or yourself will result in private detention and/or an administrative referral. If you have special circumstances which you believe require special consideration, inform the teacher *immediately*. Communication between student and teacher is absolutely essential for problems to be resolved; knowing this, any type of procrastination voids all future considerations.

MAKE-UP POLICY

If a student is absent the day of, or one day prior to a Quiz or Exam, he/she has the number of days absent, plus three (3) additional school days to make-up the Quiz/Exam and receive full credit. After the make-up time has expired, an alternative Quiz/Exam may be administered, but eligibility to take the alternative assessment must be earned by completing additional work assigned by the teacher to compensate for loss of mastery that typically occurs when too much time elapses.

THE COMPUTATIONAL NOTEBOOK & 3-RING BINDER – MANAGE, MAINTAIN, MONITOR

Computational Notebooks & 3-Ring Binders will serve as artifacts of record with which students shall provide the only accepted tangible evidence of “legitimate effort”. Students should keep this in mind, as all opportunities for “Recovery” are based on thoroughness and accuracy in completing homework and classwork, solving problems on worksheets, documenting completion of online labs, constructing economic models/graphs/illustrations, and answering free-response questions (FRQ’s).

STUDENT EVALUATION

Computational Notebooks & 3-Ring Binders may be evaluated without notice for completeness, accuracy, and precision. Sloppy/hastily completed work will never earn credit. The Computational Notebook and 3-Ring Binder (homework, worksheets, etc.) serve as tangible evidence that students are putting forth a legitimate effort to learn and master material.

Quizzes serve as a platform through which students communicate how they are progressing in their *learning* of unit objectives (as opposed to their mastery of unit objectives). Quizzes are typically announced two days prior to administration; if absent one day prior to a Quiz, students have the option to make-up the Quiz. Quizzes cover material from reading assignments, class lessons, online lessons, vocabulary, worksheets, and other activities such as illustrating graphs and completing charts.

Unit Exams are “major assessments” designed to assess a student’s *mastery* of unit objectives. Unit Exams are always announced several days prior to administration. There will be five (5) Unit Exams during the course. Unit Exams typically consist of 35-60 multiple-choice questions and 1-3 free-response questions (FRQ). Unit Exams are timed to approximate conditions students will experience during the College Board Exam. Most Unit Exams will be administered over two days.

The Final Exam (aka “Semester Final Exam”) is a comprehensive exam that will assess a student’s mastery of all material covered in the course. The Final Exam will be administered at the end of the semester, and will include multiple choice questions and free response questions (FRQ) patterned after what students can expect to see on the College Board Exam.

The College Board AP Microeconomics Exam (CBAPME) will be administered on May 18, 2018, at 8:00am, thus affording students the opportunity to earn college credit for a course taken in high school. All students are expected to take the CBAPME, which is comprehensive. After-school reviews will be held during the weeks leading up to the CBAPME in May.

“UNIT EXAM RECOVERY TEST” IN AP MICROECONOMICS

If a student considers a Unit Exam score to be ‘less-than-desirable’ (whether it’s a 50%, 70%, 90%...), he/she may be granted the opportunity to increase the score by taking a “Unit Exam Recovery Test” if the following conditions are met:

1. Provide evidence of legitimate efforts to learn the material before the Unit Exam (see “Notebook & 3-Ring Binder”)
2. Complete teacher designated remediation assignments after the Unit Exam, and within the time allotted by Mr. Silver.
3. Sign-up for one of the designated Unit Exam Recovery Test dates/times, and promptly arrive at the designated location.

If a student demonstrates *statistically significant improvement in his/her Test Score, the Unit Exam Recovery Test Score will replace the Original Unit Exam Score (with a cap on the maximum possible score), based on the following formula:**

\underline{Y} = Original Score	+	$[(100 - \underline{Y})/2]$	=	Maximum Score
EXAMPLES: $\underline{Y} = 48\%$	+	$[(100 - 48)/2] = 26$	=	$48 + 26 = 74$
$\underline{Y} = 58\%$	+	$[(100 - 58)/2] = 21$	=	$58 + 21 = 79$
$\underline{Y} = 68\%$	+	$[(100 - 68)/2] = 16$	=	$68 + 16 = 84$
$\underline{Y} = 78\%$	+	$[(100 - 78)/2] = 11$	=	$78 + 11 = 89$
$\underline{Y} = 88\%$	+	$[(100 - 88)/2] = 6$	=	$88 + 6 = 94$
$\underline{Y} = 94\%$	+	$[(100 - 94)/2] = 3$	=	$94 + 3 = 97$

*** Statistically significant improvement is based on the following formula:**

$$[\sqrt{(100 - \underline{Y})/2}] \times 2$$

EXAMPLE: $[\sqrt{26}] = 5.1$

$$[5.1] \times 2 = 10.2$$

Original Score of 48% must improve 10.2 pts

Unit Exam Recovery Tests are administered 5-10 school days after each Unit Exam, and will be offered on designated dates, before and/or after school. Students with official, school-related events that create a scheduling conflict with ALL designated test dates/times must provide proof. Due to county policy, no Unit Exam Recovery Test is offered following the Unit 5 Exam.

AVAILABILITY - APPOINTMENTS ARE RECOMMENDED AND MAY BE REQUIRED

Mr. Silver will be available before and after school Monday-Friday for make-ups and to provide extra help. It is the teacher’s prerogative to establish a limited schedule of opportunities to make-up a Quiz, Unit Exam, or take a Unit Exam Recovery Test.

BEFORE SCHOOL APPOINTMENTS

7:45am-8:15am (Mon-Fri)

LUNCH TIME APPOINTMENTS

4A (if available - no guarantees)

AFTER SCHOOL APPOINTMENTS

3:30pm-4:30pm (Mon-Thurs)

UNIT 1: AN INTRODUCTION TO MICROECONOMICS (2 WEEKS)

Readings, Topics, Key Concepts and Skills

[8-14% of AP Exam]

Mr. Silver – AP Microeconomics

Unit 1: Key Concepts and Skills

1. Define the science of economics; distinguish between macroeconomics and microeconomics.
2. Distinguish between opportunity cost, scarcity, and tradeoffs.
3. Use a production possibilities curve (PPC) to illustrate opportunity cost and growth.
4. Describe the impact of specialization and division of labor on efficiency, productivity, and growth.
5. Contrast positive economics and normative economics.
6. List the three basic economic questions; compare and contrast economic systems that must answer them.
7. Calculate absolute and comparative advantage, terms of trade, and benefits of voluntary exchange.
8. Explain the roles of household, businesses, govt in product markets & factor markets (circular flow of economic activity)

I. Readings: Chapter 1, The Nature and Method of Economics pp 3-21

- a. The economic perspective: scarcity and choice, rational behavior, thinking 'at the margin', benefits and costs.
- b. Why study economics: Economics for citizenship, professional and personal applications
- c. Economic methodology: theoretical economics, policy economics
- d. Macroeconomics and microeconomics: macroeconomics, microeconomics, positive and normative economics
- e. Pitfalls to sound reasoning: biases, loaded terminology, definitions, fallacy of composition, causation fallacies

II. Readings: Appendix to chapter 1: graphs and their meaning. Chapter 2, The Economizing Problem, pp. 22–38

- a. The foundation of economics: unlimited wants, scarce resources
- b. Economics: employment & efficiency, full employment, using available resources, full production, using resources efficiently, production possibilities table, production possibilities curve (PPC), law of increasing opportunity cost, efficiency revisited
- c. Unemployment, Growth and the Future: unemployment and productive efficiency, a growing economy, a qualification-international trade, examples and applications
- d. Consider this: A matter of degrees, Is college worth the cost?
- e. Economic systems: the market system, the command system, traditional economy
- f. The circular flow model

III. Readings: Chapter 6, The United States and the Global Economy pp. 96-99;

- a. Specialization & Comparative Advantage: basic principle, comparative cost, terms of trade, gains from specialization & trade

IV. Readings: Chapter 37, International Trade, pp. 691-697

- a. Economic Basis for Trade (absolute advantage and relative efficiency, comparative advantage and relative opportunity cost)
- b. Comparative Advantage Graphical Analysis: two isolated nations, specialization based on comparative advantage, terms of trade, gains from trade, trade with increasing costs, the case for free trade
- c. Consumption possibilities curve (CPC)

V. Readings: Chapter 4, The market system, pp. 60-72

- a. Characteristics of the market system: private property, freedom of enterprise and choice, self-interest, competition, markets and prices, reliance on technology and capital goods, specialization, use of money, active but limited government
- b. The market system at work: what will be produced, how will goods and services be produced, who will get the goods and services, how will the system accommodate change?
- c. Competition and the "Invisible hand"

VI. Readings: Chapter 5, The U.S. Economy: private and public sectors, pp. 73-90

- a. Households as income receivers: functional distribution of income, the personal distribution of income
- b. The business population
- c. Legal forms of businesses: advantages and disadvantages, the principle-agent problem
- d. The public sector: government's role
- e. Providing the legal structure, maintaining competition, redistributing income, reallocating resources, promoting stability, government's role: a qualification
- f. The Circular Flow revisited

UNIT 2: THE NATURE AND FUNCTION OF PRODUCT MARKETS (3 WEEKS)
Readings, Topics, Key Concepts and Skills

[20-30% of AP Exam]
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Unit 2: Key Concepts and Skills

1. List the determinants of demand and supply.
2. Recognize which factors will cause demand curves or supply curves to shift.
3. Distinguish between changes in quantity demanded and a change in demand.
4. Distinguish between changes in quantity supplied and a change in supply.
5. Determine equilibrium using a demand/supply graph, show the effects on price and quantity when equilibrium changes.
6. Distinguish between a normal and an inferior good.
7. Distinguish between a substitute and a complementary good.
8. Predict the effect of an effective price ceiling or floor in a market.
9. Calculate elasticity using the midpoint formula.
10. Use demand-and-supply graphs to show the effect of differences in elasticity.
11. Define the law of diminishing marginal utility.
12. Use the income effect and the substitution effect to explain the down-sloping demand curve.
13. Apply the utility-maximizing rule.
14. Given a demand/supply graph, identify/calculate the area of consumer surplus/producer surplus.

Readings: Chapter 3, Individual Markets: Demand and Supply, pp. 39-58

- Markets
- Demand: law of demand, the demand curve, market demand, change in demand, changes in quantity demanded
- Supply: law of supply, the supply curve, determinants of supply, changes in supply, changes in quantity supplied
- Supply and demand: market equilibrium: surpluses, shortages, equilibrium price and quantity, rationing function of prices, changes in supply, demand, and equilibrium, A reminder, “Other things equal”
- Price ceilings and shortages, price floors and surpluses

Readings: Chapter 21, Consumer Behavior and Utility Maximization

- A closer look at the law of demand, income and demand: income and substitution effects, law of diminishing marginal utility
- Theory of consumer behavior: consumer choice and budget constraint, utility maximizing rule, numerical example, algebraic restatement
- Utility maximization and the demand curve: deriving the demand schedule and curve, income and substitution effects revisited
- Diamond-water paradox, value of time and other examples

Readings: Chapter 20, Elasticity of demand and supply, pp.356 – 370.

- Price elasticity of demand: The price elasticity coefficient and formula, interpretations of elasticity of demand, refinement of the midpoint formula, graphic analysis, the total revenue test, price elasticity and the total revenue curve, determinants of elasticity of demand, applications of price elasticity of demand
- Price elasticity of supply: the market period, price elasticity of supply: the short run, price elasticity of supply: the long run, applications of price elasticity of supply
- Cross elasticity and income elasticity of demand

Readings: Chapter 31, use only a portion – pp. 586-593

- Apportioning the tax burden: benefits received versus ability to pay, progressive, proportional, and regressive taxes
- Tax incidence and efficiency loss: elasticity and tax incidence, efficiency loss of a tax, probable incidence of US taxes, the US tax structure

UNIT 3: THE THEORY OF THE FIRM (5 WEEKS)

Readings, Topics, Key Concepts and Skills

[35-50% of AP Exam]

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Unit 3: Key Concepts and Skills

1. Distinguish economic profit from accounting profit.
2. Use a circular flow diagram to model a market.
3. Make a distinction between the short run and the long run.
4. Define the law of diminishing marginal returns.
5. Identify per unit costs when given total costs and output; identify total costs when given per unit costs output.
6. Identify the key characteristics of the different types of market structure.
7. Use the profit-maximizing rule ($MR = MC$) to determine output price for firms in the different types of market structure.
8. Determine short-run and long-run profit in the different types of market structure.
9. Describe and illustrate the short-run and the long-run equilibrium of the purely competitive firm.
10. Describe and illustrate show profit scenario of a single price monopolist and a perfectly price-discriminating monopolist.
11. Identify the government policies employed when a firm exercises monopoly power or is a natural monopoly.
12. Describe and illustrate the equilibrium of the monopolistically competitive firm in the short run and the long run.
13. Predict the behavior of oligopolistic firms using game theory and profit matrixes.

Readings: Chapter 22, The costs of production, pp 392 – 411

- Economic costs: explicit v. implicit costs, normal profit as a cost, economic profit (or pure profit), short run v. long run
- Short-run production relationships: law of diminishing returns
- Short-run production costs: fixed, variable, and total costs, per-unit, or average, costs, marginal cost, shifts of cost curves
- Long-run production costs: firm sizes and costs, the long-run cost curve, economies and diseconomies of scale, minimum efficient scale and industry structure

Readings: Chapter 23, Pure Competition, pp 413-437

- Four market models
- Pure competition: characteristics and occurrence, relevance of pure competition
- Demand as seen by a purely competitive seller: perfectly elastic demand, average, total, and marginal revenue, graphic portrayal
- Profit maximization in the short run: total-revenue/total –cost approach, profit maximization case, marginal revenue – marginal cost approach
- Marginal cost and short-run supply: generalized depiction; diminishing returns, production costs, and product supply; changes in supply; firm and industry – equilibrium price
- Profit maximization in the long run: assumptions; goal of our analysis; long-run equilibrium; long-run supply for a constant cost industry; long-run supply for an increasing cost industry; long run supply for a decreasing cost industry
- Pure competition and efficiency: Productive efficiency: $P = \text{Minimum ATC}$; Allocative efficiency: $P = MC$
- Pure competition and consumer surplus

Readings: Chapter 24, Pure Monopoly, pp. 438-459

- An introduction to pure monopoly: examples of monopoly; dual objectives o the study of monopoly
- Barriers to entry: economies of scale, legal barriers to entry, patents and licenses, ownership or control of essential resources, pricing and other strategic barriers to entry
- Monopoly demand: marginal revenue is less than price; the monopolist is a price maker; the monopolist sets prices in the elastic region of demand
- Output and Price Determination: Cost data; $MR = MC$ rule; no monopoly supply curve; misconceptions concerning monopoly pricing; possibility of losses by a monopolist
- Economic effects of monopoly: price, output, and efficiency; income transfer; cost complications; assessment and policy options
- Price discrimination: conditions; examples of price discrimination; price discrimination outcomes
- Regulated monopoly: socially optimal price- $P = MC$; fair return price – $P = ATC$; dilemma of regulation

Readings: Chapter 25, Monopolistic Competition and Oligopoly, pp. 460-483

- Monopolistic competition: relatively large number of sellers; differentiated products; easy entry and exit; advertising; monopolistically competitive industries
- Price and output in monopolistic competition: the firm's demand curve; the short run- profit or loss; the long run; only a normal profit
- Monopolistic competition and efficiency: neither productive nor allocative efficiency; excess capacity
- Product variety: benefits of product variety; further complexity
- Oligopoly: a few large producers; homogeneous or differentiated products; control over price, but mutual interdependence; entry barriers; mergers; measures of industry concentration
- Oligopoly behavior: a game theory overview: mutual interdependence revisited; collusive tendencies; incentive to cheat
- Consider this: creative strategic behavior
- Three oligopoly models: ~~kinked-demand-curve-theory~~ noncollusive oligopoly; cartels and other collusion; price leadership model
- Oligopoly and advertising: positive effects of advertising; potential negative effects of advertising
- Oligopoly and efficiency: productive and allocative efficiency; qualifications

UNIT 4: FACTOR MARKETS (3 WEEKS)
Readings, Topics, Key Concepts and Skills

[10-18% of AP Exam]
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Unit 4: Key Concepts and Skills

1. Define derived demand.
2. Given a graph or a firm's production schedule (function) and a market wage, determine the quantity of labor a profit-maximizing firm would hire in a perfectly competitive labor market.
3. Given a graph or a firm's production schedule (function), determine the market wage and the quantity of labor a profit-maximizing firm would hire in an imperfectly competitive labor market.
4. Given a graph, identify/calculate the area of consumer surplus/producer surplus when government imposes a tariff.
5. Given a graph, identify the incidence of a tax on buyers and sellers and the deadweight loss.

Readings: Chapter 27, Demand for resources, pp. 504-520

- Significance of resource pricing
- Marginal productivity theory of resource demand: resource demand as a derived demand; marginal revenue product; rule for employing resources; $MRP=MRC$; MRP as a resource demand schedule; resource demand under imperfect product market competition; market demand for a resource
- Determinants of resource demand: changes in product demand; changes in productivity; changes in the prices of other resources; occupational employment trends
- Elasticity of resource demand
- Optimal combination of resources: the least-cost rule; the profit maximizing rule; numerical illustration
- Marginal productivity theory of income distribution

Readings: Chapter 28, Wage determination, pp. 521-541

- Labor, wages, and earnings
- General level of wages: role of productivity; real wages and productivity; secular growth of real wages
- A purely competitive labor market: market demand for labor; market supply of labor; labor market equilibrium
- Monopsony model: upward-sloping labor supply to firm; MRC higher than the wage rate; equilibrium wage and employment; examples of monopsony power
- Three union models: demand-enhancement model; exclusive or craft union model; inclusive or industrial union model; wage increases and unemployment
- Bilateral monopoly model: indeterminate outcome of bilateral monopoly; desirability of bilateral monopoly
- The minimum-wage controversy: case against the minimum wage; case for the minimum wage; evidence and conclusions
- Wage differentials: marginal revenue productivity; non-competing groups; compensating differences; market imperfections
- Pay for performance: the principal-agent problem revisited; addenda; negative side effects of pay for performance

Readings: Chapter 29, Rent, interest, and profit, pp. 542-557

- Economic rent: perfectly inelastic supply; changes in demand; land rent: a surplus payment; application: a sing tax on land; productivity differences and rent differences; alternative uses of land
- Interest: loanable funds theory of interest; extending the model; range of interest rates; pure rate of interest; role of interest
- Economic profit: role of the entrepreneur; sources of economic profit; functions of profit
- Last word: determining the price of credit
- Income shares

UNIT 5: MARKET FAILURE & THE ROLE OF GOVERNMENT (2 WEEKS)
Readings, Topics, Key Concepts and Skills

[12-18% of AP Exam]
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Unit 5: Key Concepts and Skills

1. List the economic functions of government.
2. Define a public good.
3. Discuss the free rider problem.
4. List the effect of income and payroll taxes on the economy.
5. Identify the two principles used to assess fairness of a tax.
6. Explain negative and positive externalities and give examples of each.
7. Identify possible remedies for market failures that might be employed to achieve a socially optimal allocation of resources.

Readings: Chapter 30, Government and market failure

- Public goods: demand for public goods; supply of public goods; optimal quantity of a public good; cost-benefit analysis
- Externalities: spillover costs; spillover benefits; individual bargaining: Coase Theorem; liability rules and lawsuits; government intervention; a market-based approach to spillover costs; society's optimal amount of externality reduction; recycling; global warming
- Information failures: inadequate information involving sellers; inadequate information involving buyers; qualification

Readings: Chapter 34, Income inequality and poverty, pp 631-649

- Facts about income inequality: distribution of personal income by category; distribution of personal income by quintiles (fifths); the Lorenz Curve and Gini Ratio; income mobility: the time dimension; effect of government redistribution
- Causes of income inequality: ability; education and training; discrimination; preferences and risks; unequal distribution of wealth; market power; luck, connections, and misfortune
- Trends in income inequality: causes of growing inequality, US family wealth and its distribution
- Equality versus efficiency: The case for equality: maximizing total utility; the case for inequality: incentives and efficiency; the equality-efficiency tradeoff
- The economics of poverty: definition of poverty; incidence of poverty; poverty trends; the "invisible" poor
- The income-maintenance system: social insurance programs; public assistance programs
- Welfare: goals and conflicts: common features; conflicts among goals
- Welfare reform: temporary assistance to needy families; assessment of TANF

FINAL EXAM REVIEW - SELECTED TOPICS