Verona Public School District
Curriculum Overview

AP Microeconomics

Curriculum Committee Members:
Angela Salisbury
Pamela Burke

Supervisors:
Charlie Miller
Tom Lancaster
Josh Cogdill

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Verona Public Schools
121 Fairview Ave., Verona, NJ 07044
www.veronaschools.org

Verona Public Schools Mission Statement:

The mission of the Verona Public Schools, the center of an engaged and supportive community, is to empower students to achieve their potential as active learners and productive citizens through rigorous curricula and meaningful, enriching experiences.

Course Description:

This course is an introduction to microeconomics and each student is expected to take the AP Microeconomics Exam that is administered in May. The purpose of an AP course in Microeconomics is to provide 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. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Microeconomics looks at specific economic units. At this level of analysis, the students will observe the details of an economic unit, or very small segment of the economy, under the figurative microscope. In microeconomics, we talk of an individual industry, firm, or household. We measure the price of a specific product, the number of workers employed by a single firm, the revenue or income of a particular firm, or household, or the expenditures of a specific firm, government entity, or family. In microeconomics, we examine the trees, not the forest.

Prerequisite(s):

None

Standard 8: Technology Standards		
8.1: Educational Technology: *All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.*		**8.2: Technology Education, Engineering, Design, and Computational Thinking - Programming:** *All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.*
X	A. Technology Operations and Concepts	A. The Nature of Technology: Creativity and Innovation
	B. Creativity and Innovation	B. Technology and Society
	C. Communication and Collaboration	C. Design
	D. Digital Citizenship	D. Abilities for a Technological World
	E. Research and Information Fluency	E. Computational Thinking: Programming
X	F. Critical thinking, problem solving, and decision making	

SEL Competencies and Career Ready Practices			
Social and Emotional Learning Core Competencies: *These competencies are identified as five interrelated sets of cognitive, affective, and behavioral capabilities*	**Career Ready Practices:** *These practices outline the skills that all individuals need to have to truly be adaptable, reflective, and proactive in life and careers. These are researched practices that are essential to career readiness.*		
Self-awareness: The ability to accurately recognize one's emotions and thoughts and their influence on behavior. This includes accurately assessing one's strengths and limitations and possessing a well-grounded sense of confidence and optimism.	**X**	CRP2.	Apply appropriate academic and technical skills.
		CRP9.	Model integrity, ethical leadership, and effective management.
		CRP10.	Plan education and career paths aligned to personal goals.
Self-management: The ability to regulate one's emotions, thoughts, and behaviors effectively in different situations. This includes managing stress, controlling impulses, motivating oneself, and setting and working toward achieving personal and academic goals.		CRP3.	Attend to personal health and financial well-being.
		CRP6.	Demonstrate creativity and innovation.
	X	CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
	X	CRP11.	Use technology to enhance productivity.
Social awareness: The ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports.	**X**	CRP1.	Act as a responsible and contributing citizen and employee.
		CRP9.	Model integrity, ethical leadership, and effective management.
Relationship skills: The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. This includes communicating clearly, listening actively, cooperating, resisting inappropriate social pressure, negotiating conflict constructively, and seeking and offering help when needed.	**X**	CRP4.	Communicate clearly and effectively and with reason.
	X	CRP9.	Model integrity, ethical leadership, and effective management.
	X	CRP12.	Work productively in teams while using cultural global competence.
Responsible decision making: The ability to make constructive and respectful choices about personal behavior and social interactions based on consideration of ethical standards, safety concerns, social norms, the realistic evaluation of consequences of various actions, and the well-being of self and others.	**X**	CRP5.	Consider the environmental, social, and economic impact of decisions.
	X	CRP7.	Employ valid and reliable research strategies.
	X	CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
	X	CRP9.	Model integrity, ethical leadership, and effective management.

Standard 9: 21st Century Life and Careers		
9.1: Personal Financial Literacy: *This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.*	**9.2: Career Awareness, Exploration & Preparation:** *This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.*	**9.3: Career and Technical Education:** *This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.*
X A. Income and Careers B. Money Management C. Credit and Debt Management **X** D. Planning, Saving, and Investing E. Becoming a Critical Consumer **X** F. Civic Financial Responsibility G. Insuring and Protecting	A. Career Awareness (K-4) B. Career Exploration (5-8) **X** C. Career Preparation (9-12)	A. Agriculture, Food & Natural Res. B. Architecture & Construction C. Arts, A/V Technology & Comm. **X** D. Business Management & Admin. E. Education & Training **X** F. Finance **X** G. Government & Public Admin. H. Health Science I. Hospital & Tourism **X** J. Human Services K. Information Technology L. Law, Public, Safety, Corrections & Security M. Manufacturing N. Marketing O. Science, Technology, Engineering & Math P. Transportation, Distribution & Log.

Course Materials	
Core Instructional Materials: *These are the board adopted and approved materials to support the curriculum, instruction, and assessment of this course.*	**Differentiated Resources**: *These are teacher and department found materials, and also approved support materials that facilitate differentiation of curriculum, instruction, and assessment of this course.*
Krugman’s Economics 2nd Edition Jacob Clifford's AP Microeconomics Teacher Resources	Direct instruction, multimedia presentations, class discussions, cooperative structures, video viewing with discussion questions, use of the internet for research and classroom flipping, interactive graphing and google classroom discussion groups.

AP Microeconomics

Unit 1: *Basic Economic Concepts*	Duration: 3 weeks
STAGE 1: DESIRED RESULTS	

Established Goals:

National Content Standard(s) For Economics addressed:

1.1 Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.

1.2 Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset or supplement the initial effects of the decision.

2.1 To produce the profit maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.

2.3 To compare marginal benefits with marginal costs that are realized at different times, benefits and costs must be adjusted to reflect their values at the time a decision is made about them. The adjustment reflects expected returns to investment compounded over time.

2.4 Costs that have already been incurred and benefits that have already been received are sunk benefits and irrelevant for decisions about the future.

2.5 People sometimes fail to treat gains and losses equally, placing extra emphasis on losses.

2.6 Some decisions involve taking risks in that either the benefits or the costs could be uncertain. Risk taking carries a cost. When risk is present, the costs should be treated as higher than when risk is not present.

2.7 Risk can be reduced by diversification

3.1 Comparing the benefits and costs of different allocation methods in order to choose the method that is most appropriate for some specific problem can result in more effective allocations and a more effective overall allocation system.

3.2 Changing the distribution of income or wealth will cause the allocation of resources to change.

4.1 Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide them the highest possible net benefits.

4.2 Decision making in small and large firms, labor unions, educational institutions, ad not-for-profit organizations has different goals and faces different rules and constraints.These goals, rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior.

4.3 People tend to respond to fair treatment with fair treatment and to unfair treatment with retaliation, even when such reactions may not maximize their material wealth.

5.1 Imports are paid for by exports, savings or borrowing.

5.2 When imports are restricted by public policies, consumers pay higher prices and job opportunities and profits in exporting firms may increase.

6.1 Individuals and nations have a comparative advantage in the production of goods or services if they can produce a product at a lower opportunity cost than other individuals or nations.

<table>
<tr><td colspan="2">6.2 International trade stems mainly from factors that confer comparative advantage, including international differences in the availability of productive resources and differences in relative prices.
6.3 Transaction costs are costs (not to be confused with the price of a good or service) that are associated with the purchase of a good or service, such as the cost of locating buyers or sellers, negotiating the terms of an exchange, and insuring that the exchange occurs on the agreed upon terms. When transaction costs decrease, trade increases.
6.4 The goods or services that an individual, region, or nation can produce at lowest opportunity cost depend on many factors (which may vary over time), including available resources, technology, and political and economic institutions.
10.1 Property rights, contract enforcement, standards for weights and measures, and liability rules affect incentives for people to produce and exchange goods and services.
10.2 Incorporation allows firms to accumulate sufficient financial capital to make large-scale investments and achieve economies of scale. Incorporation also reduces the risk to investors by limiting stockholders’ liability to their share of ownership of the corporation
14.3 Productivity and efficiency gainst that result from innovative practices of entrepreneurs foster long term economic growth.</td></tr>
<tr><td colspan="2" align="center">Transfer</td></tr>
<tr><td colspan="2">Transfer Goal:
Students will be able to independently use their learning to...
Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving scarcity, marginal analysis and comparative advantage..</td></tr>
<tr><td colspan="2" align="center">Meaning</td></tr>
<tr><td>Enduring Understandings
Students will understand that:
Economic resources are limited/scarce which implies that the goods/services they produce are limited.
Scarcity requires that choices be made.
All decisions involve costs. A decision involves future costs.
Marginal Analysis weighs the benefits against the costs.
Economies should specialize in those products in which they have a comparative advantage.
Sound economic choices take into account the complex interaction of human and market behaviors.
The introduction of new scientific and technological innovations can alter the means of production, the cost of production,and the distribution of services and goods through demand changes.</td><td>Essential Questions
How does economics affect everyone?
How do we make good economic choices?
Why do people specialize?
How can individuals, groups, and societies apply economic reasoning to make difficult choices about scarce resources?
What are the possible consequences of these decisions for individuals, groups, and societies?
How have scientific and technological developments over the course of history changed the way people live and economies and governments function?
What factors are considered in economic decision making?</td></tr>
<tr><td colspan="2" align="center">Acquisition of Knowledge & Skills</td></tr>
<tr><td>Students will know:</td><td>Students will be able to:</td></tr>
</table>

● How scarcity and choice are central to the study of economics ● How property rights and incentives cause economies to differ from command economies. ● The importance of opportunity cost and marginal analysis in individual choice and decision making ● The difference between positive economics and normative economics ● When economists agree and why they sometimes disagree ● How the production possibilities model helps economists think about the trade-offs every economy faces. ● How the production possibilities model helps us understand three important aspects of the real economy: efficiency, opportunity cost, and economic growth. ● How trade leads to gains for an individual and for national economies. ● The important distinction between absolute advantage and comparative advantage. ● How comparative advantage leads to gains from trade in the global marketplace	● Identify opportunity costs in given scenarios. ● Draw a production possibility curve (PPC) that demonstrates increasing opportunity costs. ● Model comparative advantage in graph form and interpret the results as it relates to trade. ● Construct production possibilities frontiers and decipher given ones. ● Analyze given data to determine marginal benefits and costs.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Reading quizzes will provide immediate formative feedback.

- Module Reading Quizzes
- Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ's.
- Unit Assessments will incorporate both multiple choice questions and FRQ's.

AP Microeconomics

Unit 2: *Supply, Demand, and Consumer Choice*	**Duration:** 7 weeks
STAGE 1: DESIRED RESULTS	
Established Goals:	

National Content Standard(s) For Economics addressed:
2.1 To produce the profit maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.
2.4 Costs that have already been incurred and benefits that have already been received are sunk benefits and irrelevant for decisions about the future.
7.1 Market outcomes depend on the resources available to buyers and sellers, and on government policies.
7.2 A shortage occurs when buyers want to purchase more than producers want to sell at the prevailing price.
7.3 A surplus occurs when producers want to sell more than buyers want to purchase at the prevailing price.
7.4 Shortages of a product usually result in price increases in a market economy; surpluses usually result in price decreases.
8.1 Demand for a product changes when there is a change in consumers' incomes, preferences, the prices of related products, or in the number of consumers in a market.
8.2 Supply of a product changes when there are changes in either the prices of the productive resources used to make the product, the technology used to make the product, the profit opportunities available to producers from selling other products, or the number of sellers in a market.
8.3 Changes in supply or demand cause relative prices to change; in turn, buyers and sellers adjust their purchase and sales decisions.
8.4 Government-enforced price ceilings set below the market-clearing price and government-enforce price floors set above the market-clearing price distort price signals and incentives to producers and consumers. Price ceilings can cause persistent shortages, while price floors can cause persistent surpluses.

Transfer:

Transfer Goal:
Students will be able to independently use their learning to...
Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving the supply and demand curve and consumer choice.

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<tr><th colspan="2">Meaning</th></tr>
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Enduring Understandings
Students will understand that:

Supply and demand is a fundamental economic model, that is used to understand how price and quantity are determined in the market.
The demand for a good or service is determined by consumers who are trying to maximize their satisfaction.
The supply of a good or service is determined by businesses seeking to maximize profits.
When the price of a good or service rises, people buy less, and when the price falls, people buy more.
How much less or more will people buy when the price changes?
Economists measure consumers responsiveness to price with a particular number is called the price elasticity of demand.
Economists measure consumers responsiveness to price with a particular number which is called the price elasticity of demand.
Economists use the term utility to describe a consumer's satisfaction.

</td><td>

Essential Questions

How does supply and demand interact?
How do we decide what to buy?
How do suppliers decide what goods and services to offer?
Is the price right?
How much should firm produce to maximize profit?
If someone really wants something, does it matter how much it costs?
If a business charges more, will people stop buying its merchandise?
Can you measure how satisfied someone is with a purchase?

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<tr><th colspan="2">Acquisition of Knowledge & Skills</th></tr>
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Students will know:

What a competitive market is and how it is described by the supply and demand model.

What the demand curve is.
The difference between movements along a demand curve and changes in demand.
The factors that shift a demand curve
Learn what the supply curve is.
The difference between movements along a supply curve and changes in supply.
The factors that shift a supply curve.

How supply and demand curves determine a market's equilibrium price and equilibrium quantity.

In the case of a shortage or surplus, how price moves the market back to equilibrium

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Students will be able to:

Identify and define a competitive market.
Construct and analyze supply and demand graphs based on various scenarios.

How a demand curve is constructed.
Show the determinants of demand that will cause a demand curve to shift
How a supply curve is constructed.
Show the determinants of supply that will cause a supply curve to shift
How equilibrium is determined in a market

Determine the equilibrium market price and quantity sold.
Demonstrate on a supply and demand graph how a relevant change will affect the equilibrium price and quantity in a market.

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● The meaning of price controls, one way government intervenes in markets. o How price controls can create problems and make a market inefficient. o Why economists are often deeply skeptical of attempts to intervene in markets. o Who benefits and who loses from price controls, and why they are used despite their well-known problems ● The meaning of quantity controls, another way government intervenes in markets. o How quantity controls create problems and can make a market inefficient. o Who benefits and who loses from quantity controls, and why they are used despite their well-known problems. o How the income effect and substitution effects explain the law of demand. o The definition of elasticity, a measure of responsiveness to changes in prices or incomes. ▪ The importance of the price elasticity of demand, which measures the responsiveness of the quantity demanded to changes in price. ▪ How to calculate the price elasticity of demand. ▪ The difference between elastic and inelastic demand. ▪ The relationship between elasticity and total revenue. ▪ Changes in the price elasticity of demand along a demand curve. ▪ The factors that determine price elasticity of demand ▪ How the cross-price elasticity of demand measures the responsiveness of demand for one good to changes in the price of another good. ▪ The meaning and importance of the income elasticity of demand,a measure of the responsiveness of demand to changes in income. o The significance of the price elasticity of supply,which measures the responsiveness of the quantity supplied to changes in price. ▪ The factors that influence the size of these various elasticities ● The meaning of consumer surplus and its relationship to the demand curve.	● Identify the difference between demand/quantity demanded and supply/quantity supplied. ● Explain the following: ○ A price ceiling and a price floor on a market. ○ Quantity control in a market. ○ Government controls on market efficiency. ○ Explain how the income effect and substitution effect explain the downward-sloping demand curve. ● Describe and model how elasticity of demand is used: ○ As a measure of responsiveness to changes in price or income. ○ Price elasticity of demand as buyer responsiveness to a price change. ○ Calculate price elasticity of demand. ○ Interpret price elasticity of demand (e.g.,. Elastic vs. inelastic demand). ○ Relationship between elasticity and total revenue ○ Determinants of price elasticity of demand ○ Calculation and interpretation of cross price elasticity (e.g., substitutes and complements). ○ Calculation and interpretation of income elasticity of demand (e.g., normal vs. inferior goods). ● Describe and model how elasticity of supply is used: ○ As a measure of responsiveness to a price change. ○ Calculate price elasticity of supply. ○ Determinants of price elasticity of supply. ○ Calculation and meaning on consumer and producer surplus. ○ The use of total surplus to evaluate efficiency in markets. ● Describe the difference between efficiency and equity ● Explain how taxes can affect total surplus and create deadweight loss. ● Describe the relationship between price elasticities and tax incidence. ● Explain and model total and marginal utility and utility maximization ● Identify/Use the principle of diminishing marginal utility.

▪ The meaning of producer surplus and its relationship to the supply curve. ▪ The meaning and importance of total surplus and how it can be used to illustrate efficiency in markets. o How taxes affect total surplus and can create deadweight loss. o How the division of the tax, or incidence, depends upon the relative price elasticities of demand and supply o How consumers make choices about the purchase of goods and services o Why a consumer's goal is to maximizing utility. ▪ Why the principle of diminishing marginal utility applies to the consumption of most goods and services. ▪ How to use marginal analysis to find the optimal consumption bundle	● Understand how marginal analysis is used to determine optimal consumption.

STAGE 2: ACCEPTABLE EVIDENCE

Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Reading quizzes will provide immediate formative feedback.

- Module Reading Quizzes
- Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ's.
- Unit Assessments will incorporate both multiple choice questions and FRQ's.

AP Microeconomics

<table>
<tr><td>Unit 3: Costs of Production and Perfect Competition</td><td>Duration: 5 weeks</td></tr>
<tr><td colspan="2" align="center">STAGE 1: Desired Results</td></tr>
<tr><td colspan="2"> Established Goals:
National Content Standard(s) For Economics addressed:
7.1 Market outcomes depend on the resources available to buyers and sellers, and on government policies.
8.2 Supply of a product changes when there are changes in either the prices of the productive resources used to make the product, the technology used to make the product, the profit opportunities available to producers from selling other products, or the number of sellers in a market.
9.1 The pursuit of self interest in competitive markets usually leads to choices and behavior that also promote the national level of well being
9.2 The level of competition in an industry is affected by the ease with which new producers can enter the industry, and by consumers' information about the availability, price and quantity of substitute goods and services.
9.3 Some market structures are dominated by large firms, often competing against only a few other firms. Prices in such markets may be higher than they would be in more competitive markets.
9.4 Collusion among buyers and sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers.
9.5 The introduction of new products and production methods is an important form of competition and is a source of technological progress and economic growth. </td></tr>
<tr><td colspan="2" align="center">Transfer</td></tr>
<tr><td colspan="2">Transfer Goal:
Students will be able to independently use their learning to...
Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving profit, production, costs and the market structure Perfect Competition.</td></tr>
<tr><td colspan="2" align="center">Meaning</td></tr>
<tr><td>Enduring Understandings
Students will understand that:</td><td>Essential Questions</td></tr>
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Producers seek profit, which is the difference between total revenue and total cost.
Firms are assumed to maximize profit, but economists and accountants differ in how they define profit.
Graphs are used by economists to illustrate the story of what happens to various measure of revenue, costs and profits as output changes.
The production function shows the relationship between the inputs used for production and the output that is produced.
Factors including the number of firms in an industry, the type of product sold and the existence of barriers to entry determine the market power of firms.
Market structures exist on a spectrum from perfect competition at one end and monopoly at the other, with monopolistic competition and oligopoly lying in between.
Depending on market structure, a firm will make key decisions about output and prices very differently.

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Do graphs make complex situations easier to understand?
How do businesses determine the best price for my good or service?
Is a business product worth the sum of all of its parts?
How do businesses gain a competitive edge?

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<td colspan="2">Acquisition of Knowledge & Skills</td>
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Students will know:

The difference between explicit and implicit costs and their importance in decision making.
The different types of profit, including economic profit, accounting profit, and normal profit.
How to calculate profit
The principle of marginal analysis.
How to determine the profit-maximizing level of output using the optimal output rule
The importance of the firm’s production function, the relationship between the quantity of inputs and the quantity of output.
Why production is often subject to diminishing returns to inputs
The various types of cost a firm faces, including fixed cost, variable cost, and total cost.
How a firm’s costs generate marginal cost curves and average cost curves
Why a firm’s costs differ in the short run versus the long run.

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Students will be able to:

Determine implicit and explicit costs and how they differ.
Identity economic profit and accounting profit and explain how they differ.
Calculate accounting profit, economic profit and normal profit.
Demonstrate the relationship between the quantity of inputs and the quantity of outputs as shown by a production function.
Explain the effect of diminishing returns to inputs.
Identify short-run costs including fixed and variable costs.
Define and calculate marginal and average costs.
Graph short-run costs
Identify and graph the shapes of total, marginal, and average cost curves.
Identify the short run versus the long run.
Demonstrate economies of scale and the shape of the long-run average cost curve.
Model the optimal input mix and the cost-minimization rule.
List the characteristics of perfect competition.
Model for perfect competition market segment.
price-taking behavior

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● How a firm can enjoy economies of scale ● The meaning and dimensions of market structure. ● The four principal types of market structure, and key characteristics of them. These structures are: perfect competition, monopoly, oligopoly, and monopolistic competition ● How firms determine the optimal input mix. ● The cost-minimizing rule for hiring inputs.	○ profit maximization ○ in a graph ○ Determine profit, loss, and shutdown conditions and represent in a graph. ○ Graph long-run equilibrium and the adjustment process leading to long-run equilibrium. ○ Show the firm's short-run supply curve . ○ Show the effect of changes in the market. ○ Compare price and output ○ Compare efficiency

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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- Module Reading Quizzes
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AP Microeconomics

<table>
<tr><td>Unit 4: Imperfect Competition</td><td>Duration: 5 weeks</td></tr>
<tr><th colspan="2">STAGE 1: Desired Results</th></tr>
<tr><td colspan="2">Established Goals:

National Content Standard(s) For Economics addressed:
7.1 Market outcomes depend on the resources available to buyers and sellers, and on government policies.
8.2 Supply of a product changes when there are changes in either the prices of the productive resources used to make the product, the technology used to make the product, the profit opportunities available to producers from selling other products, or the number of sellers in a market.
9.1 The pursuit of self interest in competitive markets usually leads to choices and behavior that also promote the national level of well being
9.2 The level of competition in an industry is affected by the ease with which new producers can enter the industry, and by consumers' information about the availability, price and quantity of substitute goods and services.
9.3 Some market structures are dominated by large firms, often competing against only a few other firms. Prices in such markets may be higher than they would be in more competitive markets.
9.4 Collusion among buyers and sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers.
9.5 The introduction of new products and production methods is an important form of competition and is a source of technological progress and economic growth.</td></tr>
<tr><th colspan="2">Transfer</th></tr>
<tr><td colspan="2">Transfer Goal:
Students will be able to independently use their learning to...
Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving market structures: monopoly, monopolistic competition and oligopolies.</td></tr>
<tr><th colspan="2">Meaning</th></tr>
<tr><td>Enduring Understandings
Students will understand that:
● Market structures exist on a spectrum from perfect competition at one end and monopoly at the other, with monopolistic competition and oligopoly lying in between.</td><td>Essential Questions

● Why are some carrots more expensive than others?
● How do businesses make a profit?
● Who sets the price?
● How do economists and accountants measure profit?</td></tr>
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<tr>
<td>● Depending on market structure, a firm will make key decisions about output and prices very differently.
● Market Structures can be much more complicated than Perfect Competition.
● Many businesses are interdependent therefore economist model strategic decision making when the outcome of the decision depends on the actions of others.
● Product differentiation and advertising are key characteristics when a market structure is a combination of perfect competition and monopoly.</td>
<td>● Is price fixing legal?
● Are they really letting us have it “Your Way?”
● How do companies differentiate their products?
● Does advertising make a difference?
● Do businesses fit perfectly into each market structure?</td>
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<tr>
<td colspan="2" align="center">Acquisition of Knowledge & Skills</td>
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<tr>
<td>Students will know:

● How a price-taking firm determines its profit-maximizing quantity of output.
● How to assess whether or not a imperfect competitive firm is profitable
● How to evaluate a imperfectly competitive firm’s situation using a graph.
● How to determine a imperfect competitor’s profit or loss.
● How a firm decides whether to produce or shut down in the short run.
● Why industry behavior differs between the short run and the long run.
● What determines the industry supply curve in both the short run and the long run.
● How a monopolist determines the profit-maximizing price.
● How to determine whether a monopoly is earning a profit or a loss.
● How the monopoly outcome is different from the long-run outcome in perfect competition.
● The effects of monopoly on society’s welfare.
● How policymakers address the problems posed by monopoly.
● Why oligopolists have an incentive to act in ways that reduce their combined profit.
● Why oligopolies can benefit from collusion.
● How oligopoly can be analyzed using game theory.
    ○ The concept of the prisoner's’ dilemma.</td>
<td>Students will be able to:

● Model for imperfect competition market segments.
    ○ price-taking behavior
    ○ profit maximization
    ○ in a graph
    ○ Determine profit, loss, and shutdown conditions and represent in a graph.
    ○ Graph long-run equilibrium and the adjustment process leading to long-run equilibrium.
    ○ Show the firm’s short-run supply curve .
    ○ Show the effect of changes in the market.
    ○ Compare price and output
    ○ Compare efficiency
● Understand and graph deadweight loss resulting from a monopoly
● Define a natural monopoly and its regulation by the government
● Define and graph price discrimination and evaluating it effect on efficiency (including perfect price discrimination).
● Show and discuss the relationship between elasticity and price discrimination.
● Explain the role of interdependence in oligopoly.
● Explain collusive versus non cooperative behavior by firms.
● Explain the use of collusion and cartels to raise joint profits for oligopoly firms.
● Demonstrate the effect of incentives to cheat on the success of collusive agreements.
● Model price competition versus quantity competition.</td>
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• How repeated interactions among oligopolists can result in collusion in the absence of any formal agreement.
  ○ The legal background of antitrust policy.
• The factors that limit tacit collusion.
• The causes and effects of price wars, product differentiation, price leadership, and nonprice competition.
• The importance of oligopoly in the real world.
• How prices and profits are determined in monopolistic competition, both in the short run and in the long run.
• How monopolistic competition can lead to inefficiency and excess capacity
• How and why oligopolists and monopolistic competitors differentiate their products.
• The economic significance of advertising and brand names
	• Use game theory to analyze firm behavior in a duopoly.
	  ○ Including prisoner's' dilemma game, dominant strategies, and Nash equilibrium.
	• Understand and apply payoff matrices.
	• Demonstrate the use of strategic behavior to influence the future behavior of other firms.
	• How repeated interactions among oligopolists can result in collusion, including tacit collusion.
	• How the use of antitrust policies act to prevent collusive actions by oligopolists.
	• The factors that limit tacit collusion to raise prices.
	• How oligopolists are affected by price wars, product differentiation, price leadership, and nonprice competition in oligopoly markets.
	• Determine profit-maximizing price and quantity in monopolistic competition in the short and long run.
	• Model inefficiency and excess capacity in monopolistic competition.
	• Use of product differentiation by monopolistically competitive firms.
	• Why and how monopolistic competition firms utilize advertising and branding.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Reading quizzes will provide immediate formative feedback.

- Module Reading Quizzes
- Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ’s.
- Unit Assessments will incorporate both multiple choice questions and FRQ’s.

AP Microeconomics

Unit 5: Resource Market	**Duration:** 4 weeks
STAGE 1: Desired Results	
Established Goals: **National Content Standard(s) For Economics addressed:** 2.1 To produce the profit maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less. 7.1 Market outcomes depend on the resources available to buyers and sellers, and on government policies. 13.1 Changes in the structure of the economy, including technology, government policies, the extent of collective bargaining and discrimination, can influence personal income. 13.2 In a labor market, in the absence of other changes, a higher wage increases the reward for work and reduces the willingness of employers to hire workers. 13.3 The hope of achieving wealth can affect productivity by energizing people to work harder, while the hopelessness of escaping poverty can discourage people from trying. 13.4 Changes in the prices of productive resources affect the incomes of the owners of those resources used by firms. 13.5 Changes in demand for specific goods and services often, in the short run, affect the incomes of the workers who make those goods and services. 14.1 Entrepreneurial decisions affect job opportunities.	
Transfer	
Transfer Goal: *Students will be able to independently use their learning to...* *Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.* *In this unit…* *Students will solve real-world problems involving Resource Markets*	
Meaning	
Enduring Understandings *Students will understand that:* ● The resources used to produce a product are called inputs. ● Inputs have their own markets, and affect the supply of your product.	**Essential Questions** ● Does higher education pay? ● How does the price of your product relate to the cost of its inputs? ● Who are the buyers and sellers of inputs? ● How are input prices determined?

• Economists include land, labor, and capital in the Resource Market.	• How does a firm allocate its expenditures among the various resources?
Acquisition of Knowledge & Skills	
Students will know: • How factors of production—resources like land, labor, and capital—are traded in factor markets. • How factor markets determine the factor distribution of income. • How the demand for a factor of production is determined • How to determine demand and supply in the markets for land and capital. • How to find equilibrium in the capital and land markets. • How the demand for factors leads to the marginal productivity theory of income distribution • The way in which a worker's decision about time preference gives rise to labor supply. • How to find equilibrium in the perfectly competitive labor market. • How equilibrium in the labor market is determined if either the product or the factor market is not perfectly competitive • How firms determine the optimal input mix. • The cost-minimizing rule for hiring inputs. • Labor market applications of the marginal productivity theory of income distribution. • Sources of wage disparities, including the role of discrimination.	**Students will be able to:** • Define physical and human capital. • Model and explain derived demand for factors of production • Model factor distribution of income between land, labor, capital and entrepreneurship. • Model Marginal productivity and the *MP* curve. • Define and graph *MRP* and factor demand curves. ○ Shifts in the factor demand curve. • Model Supply and demand in the markets for land and capital. • Apply marginal productivity theory. • Graph the labor supply curve, individual and market. • Identify equilibrium in the labor market. • Identify and define perfectly competitive and imperfectly competitive labor markets • Calculate the cost-minimizing input combination and the optimal input mix • Define and explain theories of income distribution.
STAGE 2: ACCEPTABLE EVIDENCE	
Performance Task & Unit Assessments: Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Module reading quizzes will provide immediate formative feedback. • Module Reading Quizzes • Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ's. • Unit Assessments will incorporate both multiple choice questions and FRQ's.	

AP Microeconomics

Unit 8: ***Market Failures and Government Involvement***	**Duration:** 4 weeks

STAGE 1: Desired Results

Established Goals:

National Content Standard(s) For Economics Addressed:

1.2 Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset or supplement the initial effects of the decision.
2.1 To produce the profit maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.
2.3 To compare marginal benefits with marginal costs that are realized at different times, benefits and costs must be adjusted to reflect their values at the time a decision is made about them. The adjustment reflects expected returns to investment compounded over time.
15.1 Economic growth is a sustained rise in a nation's production of goods and services. Long term growth in output results from improvements in labor productivity and increases in employment. It varies across countries because of differences in investments in human and physical capital, research and development, technological change, and from alternative institutional arrangements and incentives.
15.2 Historically, economic growth that raises per capita output has been a vehicle for alleviating poverty and raising standards of living.
15.3 Investing in new physical or human capital can increase future productivity and consumption, but such investments require the sacrifice of current consumption and entail economic risks.
15.5 The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).
16.1 Markets do not allocate resources efficiently if: (1) property rights are not clearly defined or enforced; (2) externalities (spillover effects) affecting large numbers of people are associated with the production or consumption of a product; or (3) markets are not competitive.
16.2 An important role for government in the economy is to define, establish, and enforce property rights. A property right to a good or service includes the right to exclude others from using the good or service and the right to transfer the ownership or use of the resource to others.
16.3 Property rights provide incentives for the owners of resources to weigh the value of present uses against the value of conserving the resources for future use.
16.4 Externalities exist when some of the costs or benefits associated with production and consumption fall on someone other than the producers or consumers of the product.
16.6 In the United States, the federal government enforces antitrust laws and regulations to try to maintain effective levels of competition; however, laws and regulations can also have unintended effects of reducing competition.
16.7 When one producer can supply total output in a market at a cost that is lower than when there are two or more producers, competition may be undesirable. In the absence of competition, government regulations may then be used to try to control price, output, and quality, or government may directly provide the good or service.
16.8 Government laws establish the rules and institutions in which markets operate. These include such things as property rights, collective bargaining rules, laws about discrimination, and laws regulating marriage and family life.

16.9 Governments often redistribute income directly when individuals or interest groups are not satisfied with the income distribution resulting from markets; governments also redistribute income indirectly as side-effects of other government actions that affect prices or output levels for various goods and services.
16.10 Different tax structures affect consumers and producers differently.
16.11 Governments provide an alternative to private markets for supplying goods and services when it appears that the benefits to society of doing so outweigh the costs to society. Not all individuals will bear the same costs or share the same benefits of those policies.
17.1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.
17.4 Price controls, occupational licensing, and reductions in antitrust enforcement are often advocated by special interest groups. Price controls can reduce the quantity of goods and services produced, thus depriving consumers of some goods and services whose value would exceed their cost.
19.2 Unemployment rates differ for people of different ages, races, and sexes. This reflects differences in work experience, education, training, and skills, as well as discrimination.
19.4 Some people are unemployed even when the economy is said to be functioning at full employment.

Transfer

Transfer Goal:
Students will be able to independently use their learning to...
Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving Market Failure and the Role of Government

Meaning

Enduring Understandings	**Essential Questions**
Students will understand that: ● Markets Fail ● Government intervention can be justified to help failing markets. ● Government interventions are policies designed to promote efficiency. ● Conflict exists between the best interest of an individual or a firm and the best interests of a society as a whole. ● Economists keep track of income inequality and the population below the poverty line.	● Why and when does the government intervene in business activity? ● What is the difference between economic regulation and social regulation? ● What is antitrust legislation and how is it enforced? ● Do firms that pollute the environment clean up after themselves willingly? ● Why does income inequality exist? ● How is poverty measured? ● Do government programs intend to reduce poverty to benefit the poor?

Acquisition of Knowledge & Skills

Students will know:	**Students will be able to:**

● What externalities are and why they can lead to inefficiency in a market economy. ● Why externalities often require government intervention. ● The difference between negative and positive externalities. ● The importance of the Coase theorem, which explains how private individuals can sometimes remedy externalities ● How external benefits and costs cause inefficiency in markets. ● Why some government policies to deal with externalities, such as emissions taxes, tradable emissions permits, and Pigouvian subsidies, are efficient, although others, including environmental standards, are not. ● How public goods are characterized and why markets fail to supply efficient quantities of public goods. ● What common resources are and why they are overused. ● What artificially scarce goods are and why they are under-consumed. ● How government intervention in the production and consumption of these types of goods can make society better off. ● Why finding the right level of government intervention is often difficult. ● The three major antitrust laws and how they are designed to promote competition. ● How government regulation is used to prevent inefficiency in the case of natural monopoly. ● The pros and cons of using marginal cost pricing and average cost pricing to regulate prices in natural monopolies ● What defines poverty, what causes poverty, and the consequences of poverty. ● How income inequality is measured, and how it has changed over time in America. How programs like Social Security affect poverty and income inequality	● Define positive and negative externalities. ● Explain the effect of externalities on efficiency in markets. ● Defend the Coase theorem as a private solution to externalities. ● Use the supply and demand model to explain and analyze externalities. ● Discuss government policy actions to address inefficiency resulting from externalities. ● Describe the characteristic of public goods. ● Explain why markets fail to provide public goods in efficient quantities. ● Explain how common resources and artificially scarce goods are similar to public goods. ● Define the “free-rider” problem and use describing real world situations. ● Determine the optimal level of government intervention. ● Defend government regulation of natural monopoly markets. ● Use marginal cost pricing and average cost pricing to regulate natural monopolies. ● Define poverty and its consequences. ● Explain how income inequality has changed over time in the United States. ● Use the Lorenz curve and Gini coefficient to measure a country’s level of income inequality. ● Describe how programs like Social Security and unemployment insurance affect income inequality.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Module reading quizzes will provide immediate formative feedback.

- Module Reading Quizzes
- Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ’s.
- Unit Assessments will incorporate both multiple choice questions and FRQ’s.

AP Microeconomics

Unit 9: *Enrichment Modules - After the AP Exam* *Financial Markets and Crises,* and *Behavioral Economics*	**Duration:** 3 weeks

STAGE 1: Desired Results

Established Goals:

National Content Standard(s) For Economics addressed:

1.1 Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.
1.2 Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset or supplement the initial effects of the decision.
2.4 Costs that have already been incurred and benefits that have already been received are sunk benefits and irrelevant for decisions about the future.
2.5 People sometimes fail to treat gains and losses equally, placing extra emphasis on losses.
2.6 Some decisions involve taking risks in that either the benefits or the costs could be uncertain. Risk taking carries a cost. When risk is present, the costs should be treated as higher than when risk is not present.
4.3 People tend to respond to fair treatment with fair treatment and to unfair treatment with retaliation, even when such reactions may not maximize their material wealth.
9.1 The pursuit of self interest in competitive markets usually leads to choices and behavior that also promote the national level of well being
14.1 Entrepreneurial decisions affect job opportunities.
15.1 Economic growth is a sustained rise in a nation's production of goods and services. Long term growth in output results from improvements in labor productivity and increases in employment. It varies across countries because of differences in investments in human and physical capital, research and development, technological change, and from alternative institutional arrangements and incentives.
15.2 Historically, economic growth that raises per capita output has been a vehicle for alleviating poverty and raising standards of living.
15.5 The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).
16.6 In the United States, the federal government enforces antitrust laws and regulations to try to maintain effective levels of competition; however, laws and regulations can also have unintended effects of reducing competition.
16.8 Government laws establish the rules and institutions in which markets operate. These include such things as property rights, collective bargaining rules, laws about discrimination, and laws regulating marriage and family life.

Transfer

Transfer Goal:
Students will be able to independently use their learning to...

Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.

In this unit…
Students will solve real-world problems involving Financial Markets and Crises, and *Behavioral Economics*

Meaning	
Enduring Understandings *Students will understand that:* ● There are key indicators of a well-functioning financial system. ● Markets Fail. ● When markets fail, there are consequences. ● Not all purchasing decisions are rational, but economists use some basic assumptions when studying behavioral economics.	**Essential Questions** ● What is the role of government? ● How can economics influence your choice of a spouse?

Acquisition of Knowledge & Skills	
Students will know: ● Why an efficient financial system is important. ● What a shadow bank is. ● How an asset bubble can lead to an economy wide banking crisis. ● Possible consequences of a financial crisis. ● The definition of moral hazard. ● Behaviors that might be considered irrational and how emotions play into these behaviors. ● Definition and usage of sunk costs. ● That gullibility can lead to poor decision making. ● What altruism is and how economists look at it. ● People may or may not purchase products based on the environmental influence of the production of the product. ● Define of the Neoclassical Model	**Students will be able to:** ● Draw a circular-flow diagram that includes households, firms, factor markets, markets for goods and services, and financial market. ● List and describe the four major causes of the 2008 financial crisis. ● Describe the four main elements of the Dodd-Frank Act. ● Debate the role of moral hazard in the 2008 financial crisis. ● Identify types of behavior in purchasing decisions. ● Use the Ultimatum game to reveal about participants? ● Define and explain the Neo-Classical Mode

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:
Each Unit is broken down into several modules, at the end of each module the students will complete questions formatted the same as the AP Exam. Module reading quizzes will provide immediate formative feedback.

- Module Reading Quizzes
- Graph Practice will also be incorporated in the assessment in each unit. Students will be encouraged to use graphs when working through both multiple choice questions and FRQ's.
- Project based assessment.