

**Randolph Township Schools
Randolph High School**

AP Macroeconomics/AP Microeconomics

“Geography has made us neighbors. History has made us friends. Economics has made us partners, and necessity has made us allies.”

-John F. Kennedy

Humanities Department
Dr. Amelia Wright, Supervisor

Curriculum Committee:
Stephen Barrow
Kristina Piirimae

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Randolph Township Schools
Department of Social Studies
AP Macroeconomics/ AP Microeconomics

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Randolph Township Schools

Mission Statement

We commit to inspiring and empowering all students in Randolph schools to reach their full potential as unique, responsible and educated members of a global society.

Randolph Township Schools Affirmative Action Statement

Equality and Equity in Curriculum

The Randolph Township School district ensures that the district's curriculum and instruction are aligned to the state's standards. The curriculum provides equity in instruction, educational programs and provides all students the opportunity to interact positively with others regardless of race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability or socioeconomic status.

N.J.A.C. 6A:7-1.7(b): Section 504, Rehabilitation Act of 1973; N.J.S.A. 10:5; Title IX, Education Amendments of 1972

RANDOLPH TOWNSHIP BOARD OF EDUCATION

EDUCATIONAL GOALS

VALUES IN EDUCATION

The statements represent the beliefs and values regarding our educational system. Education is the key to self-actualization, which is realized through achievement and self-respect. We believe our entire system must not only represent these values, but also demonstrate them in all that we do as a school system.

We believe:

- The needs of the child come first.
- Mutual respect and trust are the cornerstones of a learning community.
- The learning community consists of students, educators, parents, administrators, educational support personnel, the community and Board of Education members.
- A successful learning community communicates honestly and openly in a non-threatening environment.
- Members of our learning community have different needs at different times. There is openness to the challenge of meeting those needs in professional and supportive ways.
- Assessment of professionals (i.e., educators, administrators and educational support personnel) is a dynamic process that requires review and revision based on evolving research, practices and experiences.
- Development of desired capabilities comes in stages and is achieved through hard work, reflection and ongoing growth.

Randolph Township Schools
Department of Social Studies
AP Macroeconomics/ AP Microeconomics

Introduction

Advanced Placement Macroeconomics/Advanced Placement Microeconomics is offered as a full-year elective course where microeconomics and macroeconomics are studied. This course is the equivalent of introductory college courses in both of these subjects. The topics of study in the macroeconomics portion of the course include: basic economic concepts, the study of measuring economic performance, the systematic analysis of the economic challenges that face our nation, the study of measuring economic performance, aggregate supply and demand, money and monetary policy, and fiscal policy and the United States in a global economy. The topics of study in the microeconomics portion of the course include: learning economic reasoning through a study of markets, the theory of the firm, and the factor markets and the relationship of government to business. Students will participate in a variety of activities designed to prepare them for the Advanced Placement Examinations in Macroeconomics and Microeconomics; each student enrolled in this course is strongly urged to take the Advanced Placement Examinations in Macroeconomics and Microeconomics. A strong mathematical background is recommended for students interested in this course.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
Curriculum Pacing Chart
AP Macroeconomics/ AP Microeconomics

SUGGESTED TIME ALLOTMENT	UNIT NUMBER	CONTENT - UNIT OF STUDY
4 weeks	I	Economics: Basic Economic Concepts
3 weeks	II	Macroeconomics: Measure of Economic Performance
4 weeks	III	Macroeconomics: Aggregate Supply, Aggregate Demand and Fiscal Policy
3 weeks	IV	Macroeconomics: Money, Banking, and Monetary Policy
3 weeks	V	Macroeconomics: Open Economy and Trade
3 weeks	VI	Microeconomics: Demand, Supply, Consumer Choice
4 weeks	VII	Microeconomics: Costs of Production, Perfect Competition
4 weeks	VIII	Microeconomics: Imperfect Competition
3 weeks	IX	Microeconomics: Resource Markets
3 weeks	X	Microeconomics: Market Failures
2 weeks	XI	Review for AP Examinations and Marking Period 4 Benchmark Project (Project - after the AP exam in May)

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT I Macroeconomics: Basic Economic Concepts

TRANSFER: Students will understand that resources are finite and that human wants are infinite, which leads to inevitable choices and trade-offs.

GOALS:

CEE - Voluntary National Content Standards for Economics Education

CEE 1:12:1 Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.

CEE 1:12:2 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.

CEE 4:12:1 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.

CEE 6:12:1 Individuals and nations

ENDURING UNDERSTANDINGS

Scarcity is the fundamental economic problem.

There are basic economic issues and components that are key to any economic system.

Demand and supply are the central forces in a market economy.

Free trade is based on the concept of comparative advantage.

KNOWLEDGE

ESSENTIAL QUESTIONS

- What, if any, should be the constraints on what a society produces?

- To what extent should goods and services that a society produces be restricted?

- What is the most important macroeconomic goal about which our society should be concerned?

- To what extent is free trade beneficial? Explain.

SKILLS

<p>have a comparative advantage in the production of goods and services if they can produce a product at a lower opportunity cost than other individuals or nations.</p> <p>CEE 6:12:2 International trade stems mainly from factors that confer comparative advantage, including international differences in the availability of productive resources and differences in relative prices.</p> <p>CEE 6:12:4 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.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and financial institution on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.14.b Judge to what extent government should intervene at the local, state, and national levels on issues related to the economy.</p> <p>SLS 6.1.12.C.14.c Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the work force), and government and consumer debt and their impact on society.</p>	<p>Students will know:</p> <p>Scarcity is the fundamental economic problem that requires societies and individuals to make choices.</p> <p>Opportunity costs involve trade-offs; the production possibilities curve is a model that represents trade-offs.</p> <p>The components of the circular flow model are interconnected.</p> <p>Typical broad macroeconomic goals include: economic freedom, equity, price stability, economic growth, and full-employment; and that there are differences between free-market, command markets, and mixed economies.</p> <p>Demand and supply are key to a market analysis.</p>	<p>Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to:</p> <p>Apply concept of scarcity in various economic situations.</p> <p>Evaluate opportunity costs for various economic choices; construct and analyze production possibilities curves.</p> <p>Draw circular flow model.</p> <p>Compare and contrast broad macroeconomic goals; compare and contrast traditional, command, market, and mixed economies.</p> <p>Differentiate between change in demand with change in quantity demanded; differentiate between change in supply with change in quantity supplied; list and explain determinants of demand, supply, and market equilibrium; draw and analyze demand and supply graphs providing both written and graphical analysis.</p>
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<p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p> <p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic needs, as reflected in the national budget.</p> <p>SLS 6.2.12.C.3.c Compare the characteristics of capitalism, communism, and socialism to determine why each system emerged in different word regions.</p> <p>SLS 6.2.12.C.5.b Compare and contrast free market capitalism, Western European democratic socialism, and Soviet communism.</p> <p>SLS 6.2.12.C.5.d Determine the challenges faced by developing nations in their efforts to compete in a global economy.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p> <p>SLS 6.2.12.C.6.d Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.</p>	<p>Comparative and absolute advantages are pivotal in modern economies when it comes to foreign trade and in determining terms of trade.</p> <p>VOCABULARY AND KEY TERMS: Economizing problem, scarcity, positive vs. normative economics, marginal cost, marginal benefit, centrally planned, free market and mixed economies, invisible hand, opportunity cost, productions possibility curve (frontier), constant and increasing opportunity costs, productive and allocative efficiency, three shifters of the PPC, capital vs. consumer goods, specialization, absolute and comparative advantage, terms of trade, circular flow, product and resource market, private and public sectors, factor payments, transfer payments, subsidies, demand, quantity demanded, supply, supply demand, utility, diminishing marginal utility, substitution effect, income effect, substitutes, complements, law of demand, law of supply, equilibrium, shifters of demand, shifters of supply, price ceiling, price floor, elasticity (elastic, inelastic)</p>	<p>Differentiate between absolute and comparative advantage and solve comparative advantage and absolute advantage problems.</p>
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ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:

- Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”) showing their knowledge of: determinants and shifters and how they impact the PPC, and Supply and Demand curves.
- Self-assessing themselves via mini-quizzes to help students evaluate their learning.

KEY LEARNING EVENTS AND INSTRUCTION:

- Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs.
- Students will conduct in-class graphing exercises done on white boards in pairs.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will read a portion (pp. 15-37) of Hernando De Soto’s *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* to explore the idea of “dead capital” due to the lack of property rights and the extra-legal sector that arises as a result.
- Students will successfully complete Supply and Demand determinant exercises.
- Students will complete appropriate modules on Albert.com as directed and appropriate.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT I: Economics Basic Economic Concepts

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
4 Weeks	<p>Basic Economic Concepts:</p> <ul style="list-style-type: none"> ● Founding Principles <ul style="list-style-type: none"> ○ Scarcity ○ Trade-offs ○ Opportunity Cost ● Types of Economics <ul style="list-style-type: none"> ○ Micro vs. Macroeconomics ○ Positive vs. Normative Economics ● Productions Possibilities Curve (Frontier) ● Circular Flow Model ● Specialization and Trade <ul style="list-style-type: none"> ○ Absolute vs. Comparative Advantage ● Demand, Supply and Price Determination 	<p>Council for Economic Education, <i>Advanced Placement Economics Macroeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-668-0</p> <p>Via the internet:</p> <ul style="list-style-type: none"> ● Albert - https://www.albert.io/ ● ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership ● ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources ● AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam ● AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> ● <i>The New York Times</i> ● <i>The Economist</i> ● <i>The Wall Street Journal</i> <p>De Soto, Hernando, <i>The Mystery [WL1] of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else</i>, pp. 15-37</p>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
Unit II Macroeconomics: Measure of Economic Performance

TRANSFER: Students will understand the impact of trends in GDP, and how inflation and unemployment play a role both in GDP, and the standard of living.

<p>GOALS: CEE - Voluntary National Content Standards for Economics Education</p> <p>CEE 1:12:2 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.</p> <p>CEE 2:12:2 To determine the optimal level of a public policy program, voters and government officials must compare the marginal benefits and marginal costs of providing a little more or a little less of the program's services.</p> <p>CEE 11:12: 1 The basic money supply in the United States consists, of currency notes, coins, and checking account deposits.</p> <p>CEE 11:12:2 In many economies, when banks make loans, the money supply increases; when loans are paid off, the money supply decreases.</p> <p>CEE 11:12:3 The consumer price index (CPI) is the most commonly used measure of price-level changes. It can be used to compare the price level of one year with price levels in earlier or later periods.</p> <p>CEE 11:12:4 The annual inflation rate is the percentage change in the average prices of goods and services over a twelve-month period.</p> <p>CEE 11:12:5 in the Long-run, inflation results</p>	<p style="text-align: center;">ENDURING UNDERSTANDINGS</p>		<p style="text-align: center;">ESSENTIAL QUESTIONS</p>	
	Standard indicators are used to measure an economy's overall health and progress.		<ul style="list-style-type: none"> What constitutes sufficient economic progress for our nation? 	
	Initial assumptions matter in economic models.		<ul style="list-style-type: none"> How much unemployment is too much in our society? In what ways should we assist or not assist the long-term unemployed in our society? 	
	A nation's overall levels of income, employment and inflation are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy.		<ul style="list-style-type: none"> Is government spending appropriate to address inflationary concerns/risk? How much government spending should be executed to achieve this goal? 	
	<p style="text-align: center;">KNOWLEDGE</p>		<p style="text-align: center;">SKILLS</p>	
	<p>Students will know:</p> <p>A thorough analysis of gross domestic product is integral in measuring the economic status of a nation.</p>		<p>Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to:</p> <p>Identify components of GDP from the expenditures approach and the income approach.</p>	

<p>from increases in a nation's money supply that exceed increases in its output of goods and services.</p> <p>CEE 12:12:1 The real interest rate is the nominal or current market interest rate of inflation.</p> <p>CEE 12:12:3 Real interest rates normally are positive because people must be compensated for deferring the use of resources from the present into the future.</p> <p>CEE 12:12:4 Riskier loans command higher rates than the safer loans because of the greater chance of default on the repayment of a risky loan.</p> <p>CEE 12:12:5 Higher real interest rates reduce business investment spending and consumer spending on housing, cars, and other major purchases.</p> <p>CEE 12:12:6 Real interest rates rise and fall to balance the amount saved with the amount borrowed. This affects the allocation of scarce resources between present and future uses.</p> <p>CEE 12:12:7 Expectations of increased inflation may lead to higher interest rates.</p> <p>CEE 12:12:8 Future values can be converted to present values by discounting the future value based on the rate of interest.</p> <p>CEE 18:12:1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.</p> <p>CEE 18:12:2 Incentives exist for political leaders to implement policies that disperse costs widely over large groups of people and benefit small and politically powerful groups of people.</p> <p>CEE 19:12:1 The unemployment rate is an</p>	<p>There are different ways to arrive at GDP, including the expenditure and income approaches.</p> <p>In general, inflation is expected in a healthy economy, but there are levels of inflation that are detrimental to a nation's growth and to an individual's standard of living; price indices (the CPI being the most common and well known) help us understand the true costs of inflation.</p> <p>Real GDP is nominal GDP after it has been adjusted for inflation.</p> <p>The market business cycle has periods of expansions and declines.</p> <p>Unemployment of a society can be measured and tells much about the stability of a country; unemployment can be categorized as seasonal, frictional, structural and cyclical.</p>	<p>Distinguish between what is and what is not counted in GDP; solve GDP problems from both the expenditures approach and the income approach.</p> <p>Define CPI, core CPI, and Gross Domestic Product Deflator. Use a price index to calculate the rate of inflation; explain how expectations regarding inflation can influence business and consumer behavior; identify relevant issues when using different inflation measurements; and recognize what groups benefit and what groups are hurt due to unanticipated inflation.</p> <p>Explain and apply concepts of real vs. nominal GDP. Calculate real GDP by adjusting nominal GDP using price indices; and evaluate strengths and weaknesses of GDP as a measurement of economic well-being.</p> <p>Graph and explain the phases of the business cycle.</p> <p>Calculate unemployment and employment rates from given data; examine how changes in composition of workforce can alter unemployment; explain the natural rate of unemployment; distinguish between seasonal,</p>
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<p>imperfect measure of unemployment because, among other reasons, it does not: (1) include workers whose job prospects, are so poor that they become discouraged from seeking jobs and leave the labor force, and (2) reflect part-time workers who are looking for full-time work.</p> <p>CEE 19:12:2 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.</p> <p>CEE 19:12:3 Unemployment can be caused by people changing jobs, by seasonal fluctuations in demand, by changes in the skills needed by employers, or by cyclical fluctuations in the level of national spending.</p> <p>CEE 19:12:4 Some people are unemployed even when the economy is said to be functioning at full employment.</p> <p>CEE 19:12:5 Changes in total employment are an important indicator of economic performance and influence levels of real GDP.</p> <p>CEE 19:12:6 Unexpected inflation imposes costs on many people and benefits others because it arbitrarily redistributes purchasing power among different groups of people. Unexpected inflation hurts savers and people on fixed incomes; it helps people who have borrowed money at a fixed rate of interest.</p> <p>CEE 19:12:7 Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.</p> <p>SLS 6.1.12.C.3.a Analyze how technological development transformed the economy, created international markets, and affected the environment in New Jersey and the nation.</p>	<p>VOCABULARY AND KEY TERMS: Macroeconomics Inflation, National Income Accounting, Spending Multipliers, Productivity, Intermediate Goods, Household Production Goods/Services, Income Approach, Expenditures Approach, Non-production goods, Durable Goods, Non-Durable Goods, Services, Investments, Inventories, Leading Indicators, Aggregate Demand, Aggregate Supply, Standard of Living, Factor Payments, The Business Cycle, Inflationary Gap, Recessionary Gap, Peak, Trough, Recession (Contraction), Recovery (Expansion), Recessionary Gap, Unemployment, Unemployment rate, Structural and Frictional and Cyclical Unemployment, Natural Rate of Unemployment, Full Employment, Inflation, Deflation, Disinflation, Demand Pull and Cost Push inflation, Nominal Wage, Real Wage, Inflation Rate, Price Indices, Quantity Theory of Money, Nominal and Real Interest Rates, Velocity of Money, Investment, Economic Indicators: GDP, Real GDP, Nominal GDP, CPI, GDP Deflator, GDP per Capita</p>	<p>frictional, structural and cyclical unemployment; and evaluate some of the economic and non-economic consequences of unemployment.</p>
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<p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and financial institution on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.b Explain how economic indicators (i.e. gross domestic product, the consumer price index, the national debt and the trade deficit) are used to evaluate the health of the economy.</p> <p>SLS 6.1.12.C.14.a Use economic indicators to evaluate the effectiveness of state and national fiscal (i.e., government spending and taxation) and monetary i.e., interest rates) policies.</p> <p>SLS 6.2.12.C.6.b. Compare and contrast demographic trends in industrialized and developing nations, and evaluate the potential impact of these trends on the economy, political stability and use of resources.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p>		
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions ("FRQs") and multiple-choice questions ("MC"), showing their knowledge of: GDP, the business cycle, impacts of the different types of unemployment and different types of inflation, various price indices and deflator. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. ● Successfully complete a Business Cycle check. 		

KEY LEARNING EVENTS AND INSTRUCTION:

- Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs.
- Students will conduct in-class graphing exercises done on white boards in pairs.
- Students will conduct in-class exercises utilizing various indices and deflators.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will successfully complete the following exercises in-pairs or individually as appropriate: GDP - What's Included exercise; Inflation: Hurt or Helped exercise; In-class CPI and GDP Deflator calculation exercises (in-pairs).
- Students will complete appropriate modules on Albert.com as directed and appropriate.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
Unit II Macroeconomics: Measure of Economic Performance

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Gross domestic product and national income concepts.</p> <ul style="list-style-type: none"> • components of GDP • Calculating GDP using the Expenditure and Income Approach. • Real vs. Nominal GDP • Per Capita GDP • Shortcomings of GDP <p>Unemployment and the Business Cycle</p> <ul style="list-style-type: none"> • Four phases of the business cycle • Measuring Unemployment • Types of Unemployment • Natural rate of Unemployment actual rate of unemployment <p>Inflation and price indices</p> <ul style="list-style-type: none"> • Calculating Consumer price Index (CPI) • Types of Inflation • Consequence of inflation • Real vs Nominal income/interest rates 	<p>Council for Economic Education, <i>Advanced Placement Economics Macroeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-668-0</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT III Macroeconomics: Aggregate Supply, Aggregate Demand and Fiscal Policy

TRANSFER: Students will understand how aggregate demand and aggregate supply are used to measure growth in a nation's economy and how, through legislation, the United States addresses a slowdown in the economy via expansionary/contractionary fiscal policy as well as through automatic stabilizers.		
GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 16:12:1 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. CEE 16:12:2 Historically, economic growth that raises per capita output has been a vehicle for alleviating poverty and raising standards of living. CEE 16:12:3 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. CEE 16:12:4 Lower interest rates encourage investment. CEE 16:12:5 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). CEE 20:12:1 Fiscal policies are decisions to	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Economic models are used to explain the state of the economy and impact of economic policy decisions.	<ul style="list-style-type: none"> What should be the proper role of government in managing the economy?
	Fiscal policy can be used to stabilize the macroeconomy, but there are benefits and costs that need to be considered when analyzing these policy options.	<ul style="list-style-type: none"> How much fiscal stimulus is appropriate? What kind of fiscal stimulus is appropriate? What are acceptable trade-offs when making economic policy? How much national debt is too much?
	KNOWLEDGE	SKILLS
	Students will know: The Aggregate Expenditure model is no longer actively used but is helpful to the historical understanding of the Aggregate Demand and Supply model. There are different historical schools of thought related to Macroeconomic analysis.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Graph, label, and explain consumption and savings functions. Explain why consumption and savings functions shift; draw, label and explain the aggregate expenditure function and its components. Compare the Classical economists' assumptions and beliefs with those of the Keynesians.

<p>change spending and taxation levels by the federal government. As fiscal policies, these decisions are adopted to influence national levels of output, employment, and prices.</p> <p>CEE 20:12:2 In the short run, increasing federal spending and/or reducing taxes can promote more employment and output, but these policies also put upward pressure on the price level and interest rates. Decreased federal spending and/or increased taxes tend to lower prices and interest rates, but they reduce employment and output levels in the short run.</p> <p>CEE 20:12:3 Over time, the interest-rate effects of an expansionary fiscal policy may lead to a decrease in private investment spending that offsets the output and employment effects of the policy.</p> <p>CEE 20:12:4 The federal government's annual budget is balanced when its revenues from taxes (and other sources) equal its expenditures. the government runs a budget deficit when its expenditures exceed its revenues. the government runs a surplus when its revenues exceed its expenditures.</p> <p>CEE 20:12:5 When the government runs a budget deficit, it must borrow to finance that deficit.</p> <p>CEE 20:12:6 The national debt is the accumulated sum of all its past annual deficits and surpluses.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and financial institution on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.b Explain how economic</p>	<p>The marginal propensity to consume and the marginal propensity to save are related to the multiplier effect and help describe general tendencies of a society.</p> <p>The Investment demand curve is downward sloping.</p> <p>The AS/AD model is a basic visual tool used in the analysis of the macro economy and evaluation of the impact of economic policy decisions.</p> <p>The Long-Run Aggregate Supply is a graph of Aggregate Supply once prices have been allowed to adjust.</p> <p>Inflation can be influenced by aggregate demand or aggregate supply events.</p> <p>Fiscal policy relates to the federal government's taxing and spending policies instituted to stabilize the economy.</p> <p>Fiscal policy can be expansionary or contractionary, and</p>	<p>Calculate the marginal propensity to consume and save from given data; calculate the multiplier from given data; and generate an example of the multiplier effect.</p> <p>Correlate interest rate and quantity of investment demanded; graph, label, and explain investment demand curves.</p> <p>Explain why aggregate demand slopes downward and what makes it shift; explain the shape of the short-run supply curve and what makes it shift; and graph aggregate demand and supply model and macroeconomic equilibrium.</p> <p>Distinguish between short-run and the long-run supply curves; evaluate inflationary and recessionary gaps using the AS/AD model.</p> <p>Distinguish between demand-pull and cost-push inflation using the AS/AD model.</p> <p>Differentiate between actual versus full-employment output levels using the AS/AD model; assess implications of various demand and supply shocks to the economy.</p> <p>Define fiscal policy; compare and contrast</p>
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<p>indicators (i.e. gross domestic product, the consumer price index, the national debt and the trade deficit) are used to evaluate the health of the economy.</p> <p>SLS 6.1.12.C.14.a Use economic indicators to evaluate the effectiveness of state and national fiscal (i.e., government spending and taxation) and monetary i.e., interest rates) policies.</p> <p>SLS 6.2.12.C.6.b. Compare and contrast demographic trends in industrialized and developing nations, and evaluate the potential impact of these trends on the economy, political stability and use of resources.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p>	<p>fiscal stabilizers can be automatic and/or discretionary.</p> <p>There are different theoretical approaches to fiscal policy and, depending on the initial assumptions, different theoretical outcomes will be obtained. Some examples include the degree at which markets are self-regulating, prices are flexible, and wages are sticky.</p> <p>There are problems and issues related to fiscal policy, including timing, political concerns, crowding out, deficit and international issues; economic growth is a key economic goal and is influenced by the productivity of workers, technology, and the size of labor force; and fiscal and monetary policies can influence economic growth.</p> <p>VOCABULARY AND KEY TERMS: Aggregate Demand, Aggregate Supply, AD and AS shifters, Fiscal Policy, Monetary Policy, Wealth Effect, Real Balance Effect, Interest Rate Effect, Foreign Trade Effect, Real Domestic Output, Disposable Income, Household Indebtedness, Consumer Expectations, Taxes, Exchange Rates, Real Balance Effect, Foreign Trade Effect, Equilibrium Price Level, Full Employment, Maximum Capacity, Recessionary Gap, Inflationary Gap, Stagflation, Capital Stock, Classical Theory of Economics, Keynesian Theory of Economics, Hayek, Phillips Curve, Autonomous Consumption, Dissavings, Discretionary Monetary Policy, Non-Discretionary</p>	<p>expansionary versus contractionary fiscal policies; identify automatic and discretionary fiscal policy stabilizers; and relate tax progressivity to automatic stability.</p> <p>Calculate and apply the balanced-budget multiplier in a given problem; compare impact of policies decisions from both a sticky wage versus flexible wages and prices, assumptions; and evaluate, formulate, and graph various fiscal policy options that can be used to stabilize the economy.</p> <p>Evaluate the short-run versus long run fiscal policy impacts; analyze issues involved with public debt and deficits, and options for financing deficits and disposing of surpluses; and correlate the effects of fiscal policy and the open economy through the net export effect.</p>
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	Monetary Policy, Automatic Stabilizers, Contractionary Fiscal Policy, Expansionary Fiscal Policy, Multiplier Effect, Marginal Propensity to Consume (MPC), Marginal Propensity to Save (MPS), Communism, Capitalism, Budget Deficit, National Debt, Recognition Lag, Administrative Lag, Operational Lag, Crowding-Out Effect, Net Export Effect	
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ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:

- Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of: AD/AS, GDP as expressed as output as depicted on the AD/AS graph, investment in human and physical capital as the means for long-term growth, the concepts of MPS/MPC in regards to additional income, real interest rate and its effect on investment and growth, the appropriateness of expansionary vs. contractionary fiscal policy and the rise of Keynesian economic theory.
- Self-assessing themselves via mini-quizzes to help students evaluate their learning.
- Completing an Aggregate Demand and an Aggregate Shifter check (individually or in pairs as appropriate); graphing (Phillips Curve, PPC).

KEY LEARNING EVENTS AND INSTRUCTION:

- Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs.
- Students will conduct in-class graphing exercises done on white boards in pairs.
- Students will conduct in-class exercises utilizing various AD and AS shifters; showing the economy in various stages via: the AD/AS model, business cycle, PPC or Phillips Curve.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will successfully complete the following exercises in-pairs or individually as appropriate: GDP - What’s Included exercise; Inflation: Hurt or Helped exercise; In-class CPI and GDP Deflator calculation exercises (in-pairs).
- Students will complete appropriate modules on Albert.com as directed and appropriate.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT III Macroeconomics: Aggregate Supply, Aggregate Demand and Fiscal Policy

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
4 Weeks	<p>Aggregate Demand Graph</p> <ul style="list-style-type: none"> • Circular flow model • Determinants of aggregate demand • Multiplier <p>Aggregate Supply Graph</p> <ul style="list-style-type: none"> • Determinants of aggregate supply • Short-run vs. Long-run analysis (AD/AS Model) • Classical Analysis • Keynesian analysis <p>Macroeconomic equilibrium</p> <ul style="list-style-type: none"> • Real output and price level (graph) • Short run vs. long run output • Actual vs. full employment output • Income-Consumption and Income-Savings Model • Marginal Propensity to consume/save • Average Propensity to consume/save • Real interest rate-investment relationship • Investment Demand Curve (graph) <p>Fiscal Policy</p> <ul style="list-style-type: none"> • Expansionary vs. Contractionary fiscal policy • Demand-side vs. Supply-side economics • Budget deficits/surpluses • Automatic stabilizers and crowding out <p>Fiscal and monetary mix</p> <ul style="list-style-type: none"> • Interaction of fiscal and monetary policies • Monetarist-Keynesian controversy 	<p>Council for Economic Education, <i>Advanced Placement Economics Macroeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-668-0</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

	<ul style="list-style-type: none"> ● Trade-Offs between inflation and unemployment <ul style="list-style-type: none"> ○ Unemployment-inflation relationship and the Phillips Curve ○ The long-run Phillips Curve ● Economic Growth <ul style="list-style-type: none"> ○ Production possibilities analysis of growth (graph) ○ US Economic growth rates ○ Accounting for growth ● Disputes over macro theory and policy <ul style="list-style-type: none"> ○ Classical view vs. Keynesian view ○ New classical view of self-correction 	
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RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT IV Macroeconomics: Money, Banking, and Monetary Policy

TRANSFER: Students will understand how the modern banking system of the United States through the Federal Reserve System and its member banks, as well as its guidance on interest rates and its sale of government bonds looks to use the money supply to keep the nation at full employment and keep inflation at an acceptable rate.		
GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 11:12:1 The basic money supply in the United States consists of currency, coins, and checking account deposits. CEE 11:12:2 In many economies, when banks make loan, the money supply increases; when loans are paid off, the money supply decreases. CEE 12:12:5 Higher real interest rates reduce business investment spending and consumer spending on housing, cars, and other major purchases. CEE 12:12:6 Real interest rates rise and fall to balance the amount saved with the amount borrowed. This affects the allocation of scarce resources between present and future uses. CEE 12:12:7 Expectations of increased inflation may lead to higher interest rates. CEE 12:12:8 Future values can be converted to present values by discounting the future value based on the rate of interest. CEE 15:12:4 Lower interest rates encourage investment. CEE 18:12:4 Fluctuations of real GDP around its potential level occur when overall spending declines, as in a recession, or when overall	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Money has different functions in society.	<ul style="list-style-type: none"> How active should the Federal Reserve Bank be in the economy?
	The stability of the money supply is important to the overall health of an economy.	<ul style="list-style-type: none"> What monetary policy measures should the Federal Reserve implement? Should the government bail out financial institutions?
	Monetary policy can be used to promote stable prices, maximum employment and economic growth in an economy.	<ul style="list-style-type: none"> Is the Federal Reserve necessary? Why or why not?
	KNOWLEDGE	SKILLS
	Students will know: Money can be used as a medium of exchange, unit of account and/or a store of value. There are currently two major classifications of money - M1 and M2.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Define functions of money. Compare M1 and M2, and other financial assets, stocks and bonds.

<p>spending increases rapidly, as in recovery form a recession or in an expansion.</p> <p>CEE 18:12:5 When real GDP rises above its potential, there is a tendency for inflation to rise. When real GDP is below its potential (as in a recession), there is a tendency for inflation to fall.</p> <p>CEE 19:12:7 Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.</p> <p>CEE 20:12:7 Monetary policies are decisions by the Federal reserve System that lead to changes in the supply of money, short term interest rates, and the availability of credit. Changes in the growth rate of the money supply can influence overall levels of spending, employment, and prices in the economy by inducing changes in the levels of personal and business investment spending.</p> <p>CEE 20:12:8 The Federal reserve System's major monetary policy tool is open market purchases or sales of government securities, which affects the money supply and short-term interest rates. other policy tools used by the Federal reserve System include making loans to banks (and charging a rate of interest called the discount rate). in emergency situations, the Federal reserve may make loans to other institutions. the Federal reserve can also influence monetary conditions by changing depository institutions' reserve requirements.</p> <p>CEE 20:12:9 The Federal reserve targets the level of the federal funds rate, a short-term rate that banks charge one another for the use of excess funds. this target is largely reached by buying and selling existing government</p>	<p>The buying power of money decreases over time due to inflation. We can compare the buying power of dollars in different years by using the time value of money formula.</p> <p>Money Market graph is used to visualize the fundamental effects of monetary policy on the money supply and nominal interest rates.</p> <p>The real interest rate has been adjusted for inflation, and the nominal interest rate has not.</p> <p>The Loanable Funds Market graph can be used to visualize and explain impact of policy, other economic decisions, loanable funds, and the real interest rate.</p> <p>On a balance sheet for a bank, assets should equal liabilities plus net worth; when loans are made in the banking system, it is said that money is "created."</p> <p>One bank can only loan out the money equal to their excess reserves, but this action can ripple throughout the banking system with multiple-deposit expansion.</p> <p>The Federal Reserve is responsible for formulating and implementing monetary policy.</p> <p>The Federal Reserve has basic tools to use for monetary</p>	<p>Calculate and apply time value of money (present and future).</p> <p>Break down money market demand into transactions and asset demand for money; explain supply of money and equilibrium in money market graph; and draw and label money market graph.</p> <p>Differentiate between real and nominal interest rates.</p> <p>Draw, label, and explain a loanable funds graph; examine determinants that cause loanable funds to shift; differentiate between the loanable funds market and the money market; relate money market, loanable funds, investment demand, and AS/AD graphs.</p> <p>Analyze T-accounts; illustrate how the banking system creates money using a "T" chart.</p> <p>Explain the limits to money creation by a single bank.</p> <p>Calculate the money multiplier and money growth possible from a given value of excess reserves; and describe the organizational structure of Federal Reserve System.</p> <p>Identify the Federal Reserve's tools of</p>
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<p>securities.</p> <p>CEE 20:12:10 The Federal reserve tends to increase interest rate targets when it feels the economy is growing too rapidly and/or the inflation rate is accelerating. it tends to lower rate targets when it wants to stimulate the short-term growth of the economy.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.b Explain how economic indicators (i.e. gross domestic product, the consumer price index, the national debt and the trade deficit) are used to evaluate the health of the economy.</p> <p>SLS 6.1.12.C.14.a Use economic indicator to evaluate the effectiveness of state and national fiscal (i.e., government spending and taxation) and monetary i.e., interest rates) policies.</p>	<p>policy such as open market operations, discount rate and reserve requirement, as well as some more recent unconventional tools.</p> <p>Open Market Operations affect the target Federal Funds Rate; here are complications associated with monetary policy. The liquidity trap is a situation when the Federal Reserve's actions during a prolonged recession have no real added positive impact on the economy.</p> <p>Monetary policy can accommodate fiscal policy.</p> <p>There is a net export effect of monetary policy that works in the same direction as the original monetary policy action.</p> <p>The Federal Reserve seeks to achieve stable prices, maximum employment, and long-term economic growth.</p> <p>VOCABULARY AND KEY TERMS: Commodity money, fiat money, liquidity. M1, M2, financial sector, loan, liability, assets, bonds, stocks, time value of money, present value, demand for money, transaction, demand, asset demand, fractional reserve banking, Federal Reserve, demand deposits, required reserves, excess reserves, balance sheet, three shifters of the money supply, reserve requirement, money multiplier, rate, open market operations (OMO), federal funds rate, real interest rate, nominal interest rate, loanable funds</p>	<p>monetary policy.</p> <p>Explain open market operations and discount rate and reserve requirement; define the target Federal Funds Rate: correlate the target Federal Funds Rate with open market operations; compare effects of contractionary versus expansionary monetary policy; and explain the liquidity trap.</p> <p>Contrast short-run versus long-run impacts of monetary policy; explain and illustrate how monetary policy can accommodate fiscal policy.</p> <p>Diagram the net export effect of monetary policy; formulate and graph monetary policy options for various economic conditions.</p> <p>Assess effectiveness of a particular monetary policy and its impact on economic growth given an economic scenario.</p>
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	market, supply and demand shifters for loanable funds, crowding out	
<p>ASSESSMENT EVIDENCE: Students will show their learning by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of: the fractional banking system, the Federal Reserve and its operations via the reserve ratio requirement, the federal funds rate and the buying and selling of government bonds. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. ● Successfully completing bank balance sheet and worksheet checks. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs. ● Students will conduct in-class graphing exercises done on white boards in pairs. ● Students will conduct in-class exercises utilizing various loanable fund and money demand shifters; showing the economy in various stages via: the AD/AS model, demand/supply of money, and the demand/supply of loanable funds. ● Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework). ● Students will complete appropriate modules on Albert.com as directed and appropriate. 		

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT IV Macroeconomics: Money, Banking, and Monetary Policy

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Money and banking</p> <ul style="list-style-type: none"> • Definition of money and its functions • Measurements of the money supply • Banks and the creation of money • Money market <p>Role of the central bank and the money supply</p> <ul style="list-style-type: none"> • Tools of the central bank • Expansionary vs. Contractionary monetary policy • Real vs. nominal interest rates 	<p>Council for Economic Education, <i>Advanced Placement Economics Macroeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-668-0</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT V Macroeconomics: Open Economy and Trade

TRANSFER: Students will understand how trade is important to modern economies and that trade leads to an increase in the standard of living for all citizens as it increases GDP.

<p>GOALS: CEE - Voluntary National Content Standards for Economics Education</p> <p>CEE 5:12:1 Imports are paid for by exports, savings or borrowing.</p> <p>CEE 5:12:2 When imports are restricted by public policies, consumers pay higher prices and job opportunities and profits in exporting firms may decrease.</p> <p>CEE 7:12:5 When the exchange rate between two currencies changes, the relative prices of the goods and services traded among countries using those currencies change; as a result, some groups gain, and others lose.</p> <p>CEE 17: 12: 3 Although barriers to international trade usually impose higher costs than benefits, they are often advocated by people and groups who expect to gain substantially from them. Because the costs of these barriers are typically spread over a large number of people who each pay only a little and may not recognize the cost, policies supporting trade barriers are often adopted through the political process.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and financial institution on the development of</p>	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	The short-run and long-run impacts of economic policies may not be the same.	<ul style="list-style-type: none"> How do we determine whether taxes are too high or too low?
	Trade-offs between inflation and unemployment may occur in the short-run but not occur in the long-run.	<ul style="list-style-type: none"> What should be the most important economic goal for our country?
	Fiscal and monetary policies can influence economic growth.	<ul style="list-style-type: none"> What kinds of economic policy strategies are best for our country?
	KNOWLEDGE	SKILLS
	<p>Students will know:</p> <p>The balance of payments of a country is the addition of all financial transactions that occur between the</p>	<p>Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to:</p> <p>Distinguish between current account balance and the capital and financial account balance;</p>

<p>the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.14.b Judge to what extent government should intervene at the local, state, and national levels on issues related to the economy.</p> <p>SLS 6.1.12.C.14.c Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the work force), and government and consumer debt and their impact on society.</p> <p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p> <p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic needs, as reflected in the national budget.</p> <p>SLS 6.2.12.C.3.c Compare the characteristics of capitalism, communism, and socialism to determine why each system emerged in different world regions.</p> <p>SLS 6.2.12.C.5.b Compare and contrast free market capitalism, Western European democratic socialism, and Soviet communism.</p> <p>SLS 6.2.12.C.5.d Determine the challenges faced by developing nations in their efforts to compete in a global economy.</p> <p>SLS 6.2.12.C.6.a Determine the global impact of increased population growth, migration and changes in urban-rural populations on natural resources and land use.</p> <p>SLS 6.2.12.C.6.b Compare and contrast demographic trends in industrialized and developing nations, and evaluate the</p>	<p>residents of that country and residents of other countries; the balance of payments must sum to zero.</p> <p>There are flexible and also fixed systems of exchange rates; in a flexible exchange rate system, the forces of demand and supply determine exchange rates.</p> <p>Fiscal and monetary policies can impact the demand or supply of a currency and, consequently, exchange rates.</p> <p>International exchange rates affect domestic policy goals and vice versa.</p> <p>VOCABULARY AND KEY TERMS: Net exports, trade surplus, trade deficit, balance of payments, current account, financial account, net capital outflow, exchange rate, currency depreciation, currency appreciation, forex (foreign exchange) shifters, fixed exchange rate, floating exchange rate</p>	<p>distinguish between the implications of these balances for the foreign exchange market.</p> <p>Explain the difference between a flexible or floating exchange rate system and a fixed-exchange rate system; graph, label, and explain foreign exchange market for a given example.</p> <p>Predict how public policy affects currency demand and supply and currency appreciation or depreciation; examine how trade restrictions, other policy actions, and international payments system affect international trade.</p> <p>Deduce how changes in net exports and capital flows affect financial and goods/services markets.</p>
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<p>potential impact of these trends on the economy, political stability and use of resources.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p> <p>SLS 6.2.12.C.6.d Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.</p>		
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the effect of exchange rates on GDP growth/decline and its impact specifically on imports/exports. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs. ● Students will conduct in-class exercises done on white boards in pairs. ● Students will conduct in-class exercises done individually or in pairs as appropriate on various exchange rate, import/export scenarios. ● Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework). ● Students will complete appropriate modules on Albert.com as directed and appropriate. 		

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT V Macroeconomics: Open Economy and Trade

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Comparative advantage revisited as to why nations trade</p> <ul style="list-style-type: none"> • Supply and Demand analysis of Exports and Imports • Trade Barriers: Tariffs, Quotas and Embargoes • Protectionism vs. free trade arguments <p>International finance</p> <ul style="list-style-type: none"> • Balance of payments, Current account, Capital Account • Flexible vs. fixed exchange rates • Currency appreciation/depreciation • US trade deficit 	<p>Council for Economic Education, <i>Advanced Placement Economics Macroeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-668-0</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VI Microeconomics: Demand, Supply and Consumer Choice

TRANSFER: Students will understand how consumers evaluate their trade-offs and choices in order to maximize their utility (satisfaction).

GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 1:12:1 Choices made by individuals, firms, or government officials are constrained by the resources to which they have access. CEE 1:12:2 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. CEE 3:12:1 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. CEE 4:12:1 Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources. CEE 4:12:2 Decision-making in small and large firms, labor unions, educational institutions, and not-for-profit organizations have different goals and face different rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior. CEE 7:12:1 Market outcomes depend on the	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	In general, consumers are rational, have income constraints, and have preferences.	<ul style="list-style-type: none"> How should consumers best allocate their scarce resources?
	When a consumer is in consumer equilibrium, he or she will be maximizing his or her total utility.	<ul style="list-style-type: none"> Who should bear the burden of a tax?
	Some goods are price elastic, while other goods are price inelastic.	<ul style="list-style-type: none"> To what extent should the government intervene in free markets?
	Knowing and understanding elasticities of demand and supply of goods can be helpful to producers, consumers, and policy makers.	<ul style="list-style-type: none"> Which goods and services should the government tax?
	KNOWLEDGE	SKILLS
	Students will know: Demand and supply are key to a market analysis.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Differentiate between change in demand with change in quantity demanded; differentiate between

<p>resources available to buyers and sellers, and on government policies.</p> <p>CEE 7:12:2 A shortage occurs when buyers want to purchase more than producers want to sell at prevailing prices.</p> <p>CEE 7:12:3 A surplus occurs when suppliers want to sell more than buyers want to purchase at the prevailing price.</p> <p>CEE 7:12:4 Shortages of a product usually result in price increases in a market economy; surpluses usually result in price decreases.</p> <p>CEE 8:12:1 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.</p> <p>CEE 8:12:2 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.</p> <p>CEE 8:12:3 Changes in supply or demand cause relative prices to change; in turn, buyers and sellers adjust their purchase and sales decisions.</p> <p>CEE 8:12:4 Government-enforced price ceilings set below the market-clearing price and government-enforced price floors set above the market-clearing price distort price signals and incentives to producers and consumers. Price ceilings can cause persistent surpluses.</p> <p>CEE 9:12:1 The pursuit of self-interest in competitive markets usually leads to choices and behavior that also promote the national level of well-being.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and</p>	<p>The price elasticity of demand, cross price elasticity of demand, and income elasticity of demand are used to help explain consumer behavior; the concept of elasticity can be used to understand the effect of taxation on consumers and producers.</p> <p>Dead-weight loss is the combined amount of consumer or producer surplus that is lost to society due to an over or under allocation of resources to produce a certain good or service.</p> <p>Price ceilings cause shortages, and price floors cause surpluses.</p> <p>The Law of Diminishing Marginal Utility is a factor as to why the demand curve slopes downward, and states that, in general, increases in satisfaction decrease as successive amounts of a good are consumed.</p> <p>The utility-maximization rule says that people will allocate their income to the point where the last dollar spent on each good consumed produces the same</p>	<p>change in supply with change in quantity supplied; list and explain determinants of demand, supply, and market equilibrium; and draw and analyze demand and supply graphs providing both written and graphical analysis.</p> <p>Define and explain price elasticity of demand, income elasticity of demand, cross elasticity of demand, and elasticity of supply with and without the midpoint formula; apply concept of elasticity to various economic problems to predict changes in equilibrium price and quantity.</p> <p>Explain and graph tax incidence and deadweight loss.</p> <p>Analyze the effects of price ceilings and floors on competitive markets and graph these effects.</p> <p>Define and give example of diminishing marginal utility' explain how income and substitution effects impact the shape of the demand curve.</p> <p>Examine diminishing marginal utility effect on the demand curve of a typical good; differentiate between total utility and</p>
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<p>financial institution on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.14.b Judge to what extent government should intervene at the local, state, and national levels on issues related to the economy.</p> <p>SLS 6.1.12.C.14.c Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the work force), and government and consumer debt and their impact on society.</p> <p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p> <p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic needs, as reflected in the national budget.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.b Explain how economic indicators (i.e. gross domestic product, the consumer price index, the national debt and the trade deficit) are used to evaluate the health of the economy.</p> <p>SLS 6.1.12.C.14.a Use economic indicators to evaluate the effectiveness of state and national fiscal (i.e., government spending and taxation) and monetary (i.e., interest rates) policies.</p> <p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic need, as reflected in the national budget.</p> <p>SLS 6.2.12.C.6.b. Compare and contrast</p>	<p>marginal utility.</p> <p>Consumer surplus is the area above the market price and below the demand curve; producer surplus is the area below the market price and above the supply curve.</p> <p>Property rights create an incentive for owners to put resources to their most efficient uses.</p> <p>VOCABULARY AND KEY TERMS: Demand, quantity demanded, supply, supply demand, utility, diminishing marginal utility, substitution effect, income effect, substitutes, complements, law of demand, law of supply, equilibrium, shifters of demand, shifters of supply, double shift rule, price ceiling, price floor, elasticity (elastic, inelastic), elasticity of demand, elasticity of supply, utility, utility maximization, consumer surplus, producer surplus, dead-weight loss, world price, tariff, quota, excise tax, tax incidence, marginal benefit, marginal cost, utility maximizing rule</p>	<p>marginal utility and graph the correlation; apply utility maximization rule in a given economic scenario.</p> <p>Illustrate and label consumer and producer surplus on a graph.</p> <p>Evaluate the significance of property rights and the role of incentives.</p>
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<p>demographic trends in industrialized and developing nations, and evaluate the potential impact of these trends on the economy, political stability and use of resources.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p> <p>SLS 6.2.12.C.6.d Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.</p>		
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the effects of price ceilings/quotas, excise taxes and who pays the weight of the tax imposed (consumer or producer); various price elasticities. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs. ● Students will conduct in-class exercises done on white boards in pairs. ● Students will conduct in-class exercises done individually or in pairs as appropriate on demand/change in demand, supply/change in supply, price ceilings/floors, excise taxes, price elasticities. ● Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework). ● Students will complete appropriate modules on Albert.com as directed and appropriate. 		

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VI Microeconomics: Demand, Supply and Consumer Choice

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Demand (graph)</p> <ul style="list-style-type: none"> • Law of demand • Market demand curve • Determinants of demand • Normal vs. Inferior goods • Substitutes and complements <p>Supply (graph)</p> <ul style="list-style-type: none"> • Law of supply • Market supply curve • Determinants of supply <p>Equilibrium and Efficiency (graph)</p> <ul style="list-style-type: none"> • Equilibrium price and quantity • Disequilibrium: surplus and shortages (graphing) <p>Government Policies (graphs)</p> <ul style="list-style-type: none"> • Price Floors and Price Ceilings • Excise taxes, Subsidies, Tariffs, Quotas <p>Elasticity</p> <ul style="list-style-type: none"> • Price, Income, and Cross Price Elasticity of Demand • The Total Revenue Test (graph) <p>Consumer Choice</p> <ul style="list-style-type: none"> • Law of Diminishing Marginal Utility, Substitution Effect, Income Effect • Marginal Benefit/Cost • Utility Maximizing Rule 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VII Microeconomics: Costs of Production, Perfect Competition

TRANSFER: Students will understand and be able to calculate the various costs (ATC, AVC, AFC, MC and TC) of production and also understand when firms should shut down production and exit the market; concurrently, students will fully understand the economy of perfect competition.		
GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 9:12:2 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. CEE 9:12:3 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. CEE 9:12:4 Collusion among buyers or sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers. CEE 9:12:5 The introduction of new products and production methods is an important form of competition and is a source of technological progress and economic growth. CEE 10:12:1 Property rights, contract enforcement, standards for weights and measures, and liability rules effect incentives for people to produce and exchange goods and services. CEE 14:12:1 Entrepreneurial decisions affect	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Economists consider both explicit and implicit costs when making decisions.	<ul style="list-style-type: none"> What trade-offs are acceptable when running a business?
	All costs are variable in the long run.	<ul style="list-style-type: none"> Should profit be the only thing that matters to businesses?
	In theory, all product markets are compared to perfectly competitive markets as the standard for efficiency.	<ul style="list-style-type: none"> How much competition is enough in a market?
	It is most efficient for producers, no matter what type of market, to produce where their marginal cost is equal to their marginal revenue, as long as they can cover their average variable costs.	<ul style="list-style-type: none"> What accounts for efficiency?
	KNOWLEDGE	SKILLS
	Students will know: Accounting profit considers explicit costs, whereas economic profits take into account both implicit and explicit costs.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Differentiate between accounting and economic profits.

<p>job opportunities.</p> <p>CEE 14:12:2 Entrepreneurial decisions are influenced by tax, regulatory, education, and research support policies.</p> <p>6.1.12. C.3a Analyze how technological development transformed the economy, created international markets, and affected the environment in New Jersey and the nation.</p> <p>SLS 6.1.12. C.3b Relate the wealth of national resources to the economic development of the United States and to the quality of life of individuals.</p> <p>SLS 6.1.12.C.5.a Analyze the economic practices of corporations and monopolies regarding the production and marketing of goods, and determine the positive or negative impact of these practices on individuals and the nation and the need for government regulations.</p> <p>SLS 6.1.12.C.5.c Analyze the cyclical nature of the economy and the impact of periods of expansion and recession on businesses and individuals.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt and financial institutions on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.12.d Assess the role of the public and private sectors in promoting economic growth and ensuring economic stability.</p> <p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p>	<p>Normal profit is the profit needed to cover costs; it is also known as zero economic profits.</p> <p>Diminishing returns affect the shape of the marginal product and total product curves.</p> <p>In the short run, at least one cost is fixed. In the long run, all costs are variable.</p> <p>The long run average cost curve is U-shaped, due to economies and diseconomies of scale.</p> <p>Sunk costs are ignored in decision making.</p> <p>There are four major categories of product markets: perfect competition, monopolistic competition, oligopoly, and monopolistic competition.</p> <p>The total cost/total revenue approach to profit maximization can be used to find production level but is less commonly talked about than the marginal revenue approach.</p> <p>Important information for production decisions can be seen in the total revenue, marginal revenue, and average</p>	<p>Define a normal profit.</p> <p>Draw, label and explain production functions; relate marginal product and diminishing returns.</p> <p>Identify characteristics that make a cost fixed or variable; define, compute, and graph total fixed cost, total variable cost, total cost, average fixed cost, average variable cost, average total cost, and marginal cost.</p> <p>Explain why the long-run average cost curve is expected to be U-shaped and the three stages of the economies of scale; explain impact of economies and diseconomies of scale on production decisions.</p> <p>Illustrate why a firm ignores fixed or sunk costs in decision making.</p> <p>Compare and contrast basic characteristics of perfect competition, monopolistic competition, oligopoly, and monopolistic competition.</p> <p>Employ the total cost/total revenue approach to profit maximization or loss minimization in the perfectly competitive market.</p> <p>Define, compute, and graph total revenue, marginal revenue, and average revenue.</p> <p>Predict production levels based on marginal cost = marginal revenue approach to decision</p>
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	<p>revenue data and graphs.</p> <p>If a firm produces, the profit maximizing or loss minimizing point is where marginal cost = marginal revenue.</p> <p>If a firm cannot cover its AVC in the short run it shuts down.</p> <p>In the long-run, there is only a normal profit with perfectly competitive firms. This is due to exit and entry.</p> <p>In perfect competition, consumer surplus and producer surplus can be seen in the market graph.</p> <p>VOCABULARY AND KEY TERMS: Production, Inputs, Outputs, Productivity, Production Simulation, Marginal Product (MP), Total Physical Product (TP), Average Product (AP), Fixed Resources, Variable Resources, Production Analysis, Law of Diminishing Marginal Returns, Specialization, Cost of Production, Perfect Competition, Short-Run Production Costs, Total Fixed Costs (FC), Total Variable Costs (VC), Total Costs (TC), Long-Run Production Costs, Average Fixed Costs (AFC), Variable Fixed Costs (AVC), Average Total Costs (ATC), Marginal Costs (MC), Cost Curves, Economies of Scale, Mass Production Techniques,</p>	<p>making, including profit maximization point, loss minimization situation, and shut-down rule in the perfectly competitive market.</p> <p>Analyze economic profit, loss, break-even point, and shutdown point in the perfectly competitive market situation.</p> <p>Differentiate the behavior of perfectly competitive firms in the short and long run; analyze and illustrate the impact of exit and entry in a perfectly competitive market.</p> <p>Define, explain, and label on a graph consumer and producer surplus in the perfectly competitive market; evaluate the importance of competitive markets.</p>
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	Constant Returns to Scale, Diseconomies of Scale, Long Run Average Cost Curve (LRATC), Revenue, Profit, Accountants, Economists, Short Run Profit Maximization Rule, Market Structures: Perfect Competition, Monopolistic Competition, Oligopoly, Monopoly, Price Taker, Short Run Profit Maximizing, Shut Down Rule, Short Run Supply Curve, Per Unit/Subsidy Tax, Lump Sum Tax, Productive Efficiency, Allocative Efficiency	
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the various imperfect markets studied: monopoly, monopolistic competition, oligopoly. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs. ● Students will conduct in-class exercises done on white boards in pairs. ● Students will conduct in-class exercises, done individually or in pairs as appropriate, and evaluate the price and output of the monopolies and monopolistic competitive markets; practice using game theory matrices in understanding how oligopolies determine decisions. ● Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework). ● Students will complete appropriate modules on Albert.com as directed. 		

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VII Microeconomics: Costs of Production, Perfect Competition

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
4 Weeks	<p>Economic vs. Accounting Costs</p> <ul style="list-style-type: none"> • Total revenue • Explicit and Implicit costs • Economic costs and profits <p>Costs of Production (graph)</p> <ul style="list-style-type: none"> • Fixed Costs, Variable Costs and Total Costs • Per-Unit Costs (AVC, AFC, ATC) • Shifts in MC, ATC, AVC, and AFC • Marginal Costs and Marginal Revenue • Sunk Costs <p>Law of Diminishing Marginal Returns (graphs)</p> <ul style="list-style-type: none"> • Stage I: Increasing Returns • Stage II: Decreasing Returns • Stage III: Negative Returns <p>Long-Run Production Costs (graph)</p> <ul style="list-style-type: none"> • Economics of Scale • Constant Returns to Scale, Diseconomies of Scale <p>Characteristics of Perfect Competition</p> <ul style="list-style-type: none"> • Price takers • Demand = MR = Price • Graph: Firm vs. Industry (Market) • Short-Run (profit or loss) • long-run Equilibrium (New Firm Enter and Exit) • Normal Profit • Shutdown Decision ($P < AVC$) • Productive Efficiency ($P = \text{Min ATC}$) • Allocative efficiency ($P = MC$) 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VIII Microeconomics: Imperfect Competition

TRANSFER: Students will be able to determine price and quantity for monopolies and determine the impact on consumer prices; determine the socially optimal and fair return prices and quantities, and understand the nature of oligopolies and how game theory helps us understand the decisions made by oligopolies.

GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 9:12:3 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. CEE 9:12:4 Collusion among buyers or sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers. CEE 9:12:5 The introduction of new products and production methods is an important form of competition and is a source of technological progress and economic growth. CEE 16:12:6 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. CEE 16:12:7 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	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Imperfect competitors use the same rule to determine price and output as perfect competitors, but with much different results for consumers.	<ul style="list-style-type: none"> Is it good for society to have single firms and/or corporations that have tremendous market share? Why or why not?
	Sometimes the government intervenes when companies have monopoly power; however, there are costs and benefits of these interventions.	<ul style="list-style-type: none"> How can consumers counterbalance increased price discrimination in the marketplace?
	Society gets more choices with monopolistic competition, but the trade-off is less efficiency due to excess capacity.	<ul style="list-style-type: none"> How much competition is enough for a particular market? What is better for our country—to regulate a monopoly at the fair return price or the socially optimal price? Explain.
	Game theory is used to predict behaviors and outcomes to real world interactions on business, government, and international platforms.	<ul style="list-style-type: none"> To what extent does game theory shed light on real business, political, and personal decision making in our world?
	KNOWLEDGE	SKILLS
	Students will know:	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to:

<p>of competition, government regulations may be used to try to control price, output, and quality, or government may directly provide the good or service.</p> <p>CEE 16:12:11 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.</p> <p>CEE 17:12:1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.</p> <p>CEE 17:12:4 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.</p> <p>SLS 6.1.12. C.3b Relate the wealth of national resources to the economic development of the United States and to the quality of life of individuals.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.c Explain the interdependence of various parts of a market economy (i.e., private enterprise, government programs and the Federal Reserve System).</p> <p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic needs, as reflected in the national budget.</p> <p>SLS 6.2.12.C.6.a Evaluate efforts of</p>	<p>Monopolies occur for different reasons such as: patents, control of resources, economies of scale, etc.</p> <p>Marginal revenue is less than price in a single priced monopolist; imperfect competition also uses marginal cost = marginal revenue rule to determine production level, however a monopoly is neither productively nor allocatively efficient. There is less consumer surplus and more producer surplus with a monopoly.</p> <p>A perfectly price discriminating monopolist creates no consumer surplus.</p> <p>If a monopoly is regulated, a dilemma for the government occurs as to what price to charge, fair return or socially optimal price.</p> <p>Monopolistically competitive firms also use the marginal cost/ marginal revenue approach to profit maximization.</p> <p>Due to exit and entry, monopolistically competitive firms usually make only a normal profit; due to excess capacity, monopolistically competitive firms are not productively or</p>	<p>Identify sources of monopoly power. Define pure monopoly.</p> <p>Illustrate why marginal revenue is less than price in a regular monopoly; apply marginal cost/marginal revenue approach to production decisions in a monopolistic market; graph monopoly with cost curves and label price and output levels; explain and illustrate on a graph how the monopoly is neither productively nor allocatively efficient; compare monopolist's price, level of output, and efficiencies with that of a perfectly competitive firm; and label consumer and producer surplus on a monopoly graph. Identify elements needed to perfectly price discriminate.</p> <p>Examine perfect price discrimination in a monopoly situation with resulting marginal revenue, and consumer/producer surpluses.</p> <p>Distinguish between a fair return price and socially optimal price in a regulated monopoly situation; evaluate various possible regulation policies regarding monopolies.</p> <p>Review characteristics of monopolistic competition. Examine profit maximization and production decision making in the monopolistic competitive market.</p> <p>Assess impact of exit and entry in a monopolistically competitive market; graph output and price levels in both short and long run</p>
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<p>governmental, nongovernmental, and international organizations to address economic imbalances and social inequalities.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p>	<p>allocatively efficient.</p> <p>Game theory is used to explain the interdependent behavior of firms in an oligopoly; a pay-off matrix is used in game theory to identify the potential outcomes of each decision; any dominant strategies, dominated strategies and Nash equilibriums should be identified in a duopoly game.</p> <p>VOCABULARY AND KEY TERMS: Imperfect Competition, Natural Monopoly, un-Natural Monopoly, Marginal Revenue, Elastic vs. Inelastic Range of Demand Curve, Price Ceilings, Socially Optimal Price, Fair-Return Price (Break-Even), F.A. Hayek, <i>The Use of Knowledge in Society</i>, Perfect Price Discrimination, Differentiated Products, Long-Run Equilibrium, Excess Capacity, OPEC, Barriers to Entry, Start-Up Costs, Game Theory, The Prisoner’s Dilemma, Nash Equilibrium, Collusion, Price Leadership, Kinked Demand Curve</p>	<p>in monopolistically competitive market; and using a graph, demonstrate the inefficiencies of monopolistic competitive situation by way of excess capacity.</p> <p>Explain game theory and interdependent behavior of firms in an oligopoly.</p>
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> • Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the various imperfect markets studied: monopoly, monopolistic competition, oligopoly. • Self-assessing themselves via mini-quizzes to help students evaluate their learning. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p>		

- Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs.
- Students will conduct in-class exercises done on white boards in pairs.
- Students will conduct in-class exercises, done individually or in pairs as appropriate, and evaluate the price and output of the monopolies and monopolistic competitive markets; practice using game theory matrices in understanding how oligopolies determine decisions.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will complete appropriate modules on Albert.com as directed.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT VIII Microeconomics: Imperfect Competition

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
4 Weeks	<p>Characteristics of Monopolies</p> <ul style="list-style-type: none"> • Barriers to Entry • MR Below Demand (graphs) • Profit-Maximizing Price and Quantity • Natural Monopoly <p>Effects on overall economy</p> <ul style="list-style-type: none"> • Compared to competitive industry • Dead-Weight loss • X-Efficiency <p>Price Discrimination (graph)</p> <ul style="list-style-type: none"> • Purpose and Results • Graph (MR=D) <p>Regulation</p> <ul style="list-style-type: none"> • Unregulated Price, Fair Return Price, and Socially Optimal Price • Taxes and Subsidies <p>Characteristics of Monopolistic Competition</p> <ul style="list-style-type: none"> • Long-Run Equilibrium (graph) • Excess Capacity • Non-Price Competition • Product Differentiation <p>Characteristics of Oligopolies</p> <ul style="list-style-type: none"> • Kinked Demand Curve-Competitive Pricing • Game Theory (chart) Price Leadership • Collusion and Cartel 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT IX Microeconomics: Resource Markets

TRANSFER: Students will be able to assess resource markets and effectively be able to calculate the optimal amount of labor and/or the optimal combination of labor and technology, based upon the price/cost of capital.

GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 13:12:2 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. CEE 13:12:3 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. CEE 13:12:4 Changes in the prices of productive resources and the combination of those resources used by firms. CEE 15:12:1 Changes in the structure of the economy, including technology, government policies, the extent of collective bargaining and discrimination, can influence personal income. CEE 15:12:2 In a labor market, in the absence of other changes a higher wage increases the reward for work and reducing the willingness of employers to hire workers. CEE 15:12:3 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. CEE 15:12:4 Changes in the prices of productive resources affect the incomes of the	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	The demand for a resource is derived from the demand for the product or service it is used to produce.	<ul style="list-style-type: none"> What obligations do firms and corporation have to society?
	The forces of demand and supply are active in all markets including factor markets.	<ul style="list-style-type: none"> How responsive are markets to price changes?
	A variation of the marginal cost equals marginal benefit rule is applied in the factor market.	<ul style="list-style-type: none"> Are unions still needed in the United States? Explain.
	A resource is employed up to the amount where the marginal revenue product is equal to the marginal resource cost.	<ul style="list-style-type: none"> Should there be a minimum wage? Explain.
	KNOWLEDGE	SKILLS
	Students will know: The demand for a resource is a derived demand.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Compare product markets with factor markets. Explain resource demand as a derived demand and determinants of resource demand.

<p>owners of those productive resources and the combination of those resources used by firms.</p> <p>CEE 15:12:5 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.</p> <p>SLS 6.1.12.C.6.c Analyze the impact of money, investment, credit, savings, debt, and financial institution on the development of the nation and the lives of individuals.</p> <p>SLS 6.1.12.C.14.b Judge to what extent government should intervene at the local, state, and national levels on issues related to the economy.</p> <p>SLS 6.1.12.C.14.c Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the work force), and government and consumer debt and their impact on society.</p> <p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p> <p>SLS 6.1.12.C.9.a Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.</p> <p>SLS 6.1.12.C.9.b Explain how economic indicators (i.e. gross domestic product, the consumer price index, the national debt and the trade deficit) are used to evaluate the health of the economy.</p> <p>SLS 6.1.12.C.14.a Use economic indicators to evaluate the effectiveness of state and national fiscal (i.e., government spending and taxation) and monetary i.e., interest rates) policies.</p>	<p>Marginal physical product is the added output that is achieved when an extra unit of a resource is used.</p> <p>Marginal revenue product is the added revenue that is obtained when an extra unit of a resource is used.</p> <p>Marginal resource cost is the added cost that is incurred when an extra unit of a resource is used; the marginal revenue product curve is the demand curve for a resource.</p> <p>The rule for employing resources is MRP equals MRC. The least-cost rule is MP of labor/price of labor is equal to the MP of capital/price of capital.</p> <p>The profit-maximizing rule is the MRP of labor/ price of labor is equal to the MRP of capital/price of capital, and also equal to 1.</p> <p>Increasing productivity in general increases the demand for the resource.</p> <p>A labor market can be more competitive or less competitive.</p> <p>A monopsony is a situation when the buyer of labor has monopoly-like power; in a monopsony, less people are hired and at lower wages than in a perfectly competitive labor market; and unions traditionally work to better the working and pay situation for their members. Increased</p>	<p>Define marginal physical product, marginal revenue product, and marginal resource cost.</p> <p>Construct a marginal revenue product curve for a resource used to produce in a perfectly competitive product market.</p> <p>Construct a marginal revenue product curve for a resource used to produce in an imperfectly competitive product market; deduce amount of resource a firm will employ using the MRP equals MRC rule.</p> <p>Calculate least-cost combination of resources to produce a particular amount of product.</p> <p>Solve the demand for resource problems using profit-maximizing rule.</p> <p>Explain the role of productivity in resource demand and determinants of productivity of a resource.</p> <p>Generate graphs of a perfectly competitive labor market and corresponding firm; determine the amount of labor hired and the wage rate in a perfectly competitive labor situation.</p> <p>Define monopsony and bilateral monopoly. Graph a monopsony labor market; deduce amount of labor hired and wage rate in a monopsony. Evaluate the effect monopsonies, unions, and international competition have on</p>
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<p>SLS 6.1.12.C.15.b Assess economic priorities related to international and domestic need, as reflected in the national budget.</p> <p>SLS 6.2.12.C.6.b. Compare and contrast demographic trends in industrialized and developing nations, and evaluate the potential impact of these trends on the economy, political stability and use of resources.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p> <p>SLS 6.2.12.C.6.d Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.</p> <p>SLS 6.1.12.C.12.d Assess the role of the public and private sectors in promoting economic growth and ensuring economic stability.</p> <p>SLS 6.1.12.C.14.d Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p>	<p>globalization has had a great impact on resource and product markets.</p> <p>Economic profit has a large role in the decision process of resource allocation.</p> <p>The loanable funds market graph has the quantity of loanable funds on the horizontal axis, and the real interest rate on the vertical axis.</p> <p>VOCABULARY AND KEY TERMS: Resource Markets, Wage Takers, Demand for Labor, Supply for Labor, Resource, Derived Demand, Complementary Resources, Substitute Resources, Resource Supply Shifters, Human Capital Argument, Signaling Argument, Ability Bias Argument, Minimum Wage, Wage Floor, Geographic Immobility, Unions, Wage Discrimination, Push-Up Machine, Marginal Resource Cost (MRC), Marginal Revenue Product (MRP), Least Cost Rule, Profit Maximizing Rule, Monopsony, Product Market, Factor Market, Circular Flow of Economic Activity, Factor Markets, Ceteris Paribus, Signaling Debate, Labor Market Imperfections</p>	<p>domestic labor markets.</p> <p>Define economic rent, land rent, and economic profit and explain what determines economic rent; analyze what role economic profit plays in the resource market.</p> <p>Apply loanable funds theory of interest to resource markets.</p>
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the various imperfect markets studied: monopoly, monopolistic competition, oligopoly. ● Self-assessing themselves via mini-quizzes to help students evaluate their learning. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs. 		

- Students will conduct in-class exercises done on white boards in pairs.
- Students will conduct in-class exercises, done individually or in pairs as appropriate, on determining the optimal amount of labor and optimal combination of labor and technology based upon the price/cost of capital.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will complete appropriate modules on Albert.com as directed.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT IX Microeconomics: Resource Markets

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Demand for Labor</p> <ul style="list-style-type: none"> • Derived Demand • Marginal Revenue Product • Marginal Resource Cost <p>Perfectly Competitive Labor Market (graph)</p> <ul style="list-style-type: none"> • Wage Makers • Perfectly Elastic Supply of Labor <p>Monopsony (graph)</p> <ul style="list-style-type: none"> • Wages and Quantity Compared to Perfectly Competitive Labor Market <p>Labor Unions</p> <ul style="list-style-type: none"> • Goals and Methods <p>Effects of Minimum Wage</p> <p>Wage Differentials</p> <ul style="list-style-type: none"> • Investment in Human Capital vs. Physical Capital 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT X Microeconomics: Market Failures

TRANSFER: Students will evaluate the various failures of the free market (income inequality, pollution, healthcare gaps, etc.) and be able to suggest market-based government interventions (taxation policies, subsidies, social welfare programs) to address these failures.

GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 16:12:1 Markets do not allocate resource 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. CEE 16:12:2 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. CEE 16:12:3 Property rights provide incentives for the owners of resources to weigh the value of present uses against the value of conserving the resource for future use. CEE 16:12:4 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. CEE 16:12:5 When a price fails to reflect all the benefits of a product, too little of the product is produced and consumed. When a price fails to reflect all the cost of a product, too much of it is produced and consumed. Government can use subsidies to help correct for insufficient output;	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Markets can work, but markets can also fail.	<ul style="list-style-type: none">What should be the role of government in managing the economy?
	Due to the free-rider problem, some public goods are necessary.	<ul style="list-style-type: none">What is the fairest kind of tax system?
	Marginal social benefit equals marginal social cost; it is applied to production of public goods.	<ul style="list-style-type: none">How should the government best correct a market failure?
	There is no “free lunch”, meaning everything has a cost.	<ul style="list-style-type: none">How much income redistribution should occur?How progressive or regressive should our tax system be?What government services are worth paying for?
	KNOWLEDGE	SKILLS
	Students will know: While markets can be efficient, they are not perfect; market failures, like externalities, can occur.	Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to: Define market failure.

<p>it can use taxes to help correct for excessive output; or it can regulate output directly to correct for over- or under-production or consumption of a product.</p> <p>CEE 16:12:6 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.</p> <p>CEE 16:12:7 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.</p> <p>CEE 16:12:8 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.</p> <p>CEE 16:12:9 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.</p> <p>CEE 16:12:10 Different tax structures affect consumers and producers differently.</p> <p>CEE 16:12:11 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</p>	<p>A public good has the qualities with respect to consumption of non-rivalry and non-excludability; a private good has the qualities with respect to consumption of rivalry and excludability.</p> <p>A free-rider is someone who can enjoy the benefit of a good but has no incentive to pay for it, and therefore doesn't pay for it.</p> <p>Externalities can be positive or negative; externalities can be remediated in different ways as explained by the Coase theorem, cap and trade, and taxation.</p> <p>The marginal social benefit equals marginal social cost rule is applied to figure out how much of a public good should be produced.</p> <p>Public choice theory can be used to explain the behavior of politicians, bureaucratic, and the electorate in economic terms.</p> <p>There are different theories of taxation such as the ability-to- pay and the benefits-received theories of taxation.</p> <p>Taxes can be progressive, proportional or regressive, and, consequently, affect different groups of people in various ways.</p> <p>Taxation can also cause dead-weight loss and efficiency loss.</p>	<p>Compare public and private goods.</p> <p>Explain free-riders and the “Tragedy of the Commons.”</p> <p>Graph examples of negative and positive externalities. Explain how negative and positive externalities can lead to overproduction or underproduction of goods and services.</p> <p>Analyze and evaluate the effectiveness of government policies designed to remedy problems caused by negative or positive externalities; apply the marginal social benefit and marginal social cost rule.</p> <p>Explain public choice theory.</p> <p>Differentiate between ability-to-pay and the benefits-received theories of taxation.</p> <p>Distinguish between progressive, proportional, and regressive taxes.</p> <p>Review tax incidence, efficiency loss, and dead-weight loss. Evaluate public policies used to promote competition.</p>
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<p>those policies.</p> <p>CEE 13:12:1 Changes in the structure of the economy, including technology, government policies, the extent of collective bargaining and discrimination, can influence personal income.</p> <p>CEE 17:12:1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.</p> <p>CEE 17:12:2 Incentives exist for political leaders to implement policies that disperse costs widely over large groups of people and benefit small, and politically powerful groups of people.</p> <p>CEE 17:12:4 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.</p> <p>SLS 6.1.12.C.13.c Evaluate the effectiveness of social legislation that was enacted to end poverty in the 1960s and today by assessing the economic impact on the economy (e.g., inflation, recession, taxation, deficit spending, employment, education).</p> <p>SLS 6.2.12.C.6.a Evaluate efforts of governmental, nongovernmental, and international organizations to address economic imbalances and social inequalities.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p>	<p>Public policy can be used to regulate markets and competition. The Lorenz Curve and Gini ratio are used to determine how much income equity exists in a society.</p> <p>Domestic markets are affected by international markets.</p> <p>VOCABULARY AND KEY TERMS: Occupational Licensing Laws, Free Market, Laissez Faire, Market Failure, Invisible Hand, Public Goods, Non-Exclusionary, Shared Consumption (Non-Rival), Externalities, Spillover Costs, Spillover Benefits, Tragedy of the Commons (The Common Pool Problem), Perverse Incentive, Distribution of Income, Public Sector, Private Sector, Free Riders, Private Goods, Club Goods, Common Resources, Marginal Social Benefit (MSB), Marginal Social Cost (MSC), Antitrust Laws, Sherman Act of 1890, Merger, Regulations, Price Ceilings, Socially Optimal Price, Allocative Efficiency, Fair-Return Price (Break-Even), Normal Profit, Natural Monopoly, Social Optimal Quantity, Subsidy, Income Inequality, Lorenz Curve, Gini Coefficient, Safety Net, Welfare, Taxes, Progressive Taxes, Proportional Taxes, Regressive Taxes, Sales Tax, Consumption Tax, Medicare, Federal Income Tax, Flat Tax</p>	<p>Interpret the Lorenz curve and the Gini ratio; explain what they tell us about income distribution for a given country; and evaluate policies related to income distribution and equity issues.</p> <p>Calculate world price of a product given corresponding economic data.</p>
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p>		

- Answering AP free response questions (“FRQs”) and multiple-choice questions (“MC”), showing their knowledge of the various imperfect markets studied: monopoly, monopolistic competition, oligopoly.
- Self-assessing themselves via mini-quizzes to help students evaluate their learning.

KEY LEARNING EVENTS AND INSTRUCTION:

- Students will work in pairs and work on in-class MC questions and FRQs to be done in pairs.
- Students will conduct in-class exercises done on white boards in pairs.
- Students will conduct in-class exercises, done individually or in pairs as appropriate, in order to practice identification of the marginal social benefit and marginal social cost and how best to remediate positive/negative externalities.
- Students will successfully complete CEE (Council for Economics Education) AP Economics worksheets, designed to provide additional practice on key concepts (in pairs in class or homework).
- Students will complete appropriate modules on Albert.com as directed.

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT X Microeconomics: Market Failures

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
3 Weeks	<p>Public Goods</p> <ul style="list-style-type: none"> • Demand for Public Goods • Supply of Public Goods • Free-rider Problem • Non-Excludability and Non-Rivalry <p>Positive Externalities/Spillover Benefits (graph)</p> <ul style="list-style-type: none"> • Marginal Social Benefits vs. Private Benefits • Underallocation • Government Remedy <p>Negative Externalities/Spillover Costs (graph)</p> <ul style="list-style-type: none"> • Marginal Social Cost vs. Private cost • Overallocation • Government Remedy <p>Income distribution</p> <ul style="list-style-type: none"> • Lorenz Curve (graph) • Tax Incidences 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> • Albert - https://www.albert.io/ • ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership • ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources • AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam • AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam <p>Via print or the internet:</p> <ul style="list-style-type: none"> • <i>The New York Times</i> • <i>The Economist</i> • <i>The Wall Street Journal</i>

RANDOLPH TOWNSHIP SCHOOL DISTRICT

AP Macroeconomics/ AP Microeconomics

UNIT XI: Review for AP Examinations (Micro and Macro exams) and Marking Period 4 Benchmark Project

TRANSFER: Students, in preparation for the AP Exams (Micro and Macro) will be able to use all of the major concepts studied in class to analyze graphs and suggest solutions for various issues. They will calculate output, prices, various price indices, multipliers, and the impact of inflation and unemployment on an economy. Students will also understand how a Lorenz Curve and Gini Coefficient illustrate the income distribution of a nation and how nations strive to address income inequality.		
GOALS: CEE - Voluntary National Content Standards for Economics Education CEE 10:12:1 Property rights, contract enforcement, standards for weights and measures, and liability rules affect incentives for people to produce and exchange goods and services. CEE 14:12:1 Changes in the structure of the economy, including technology, government policies, the extent of collective bargaining and discrimination, can influence personal income. CEE 15:12:1 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	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	Changes in social indicators lead to major changes in economic indicators.	<ul style="list-style-type: none"> What changes in social indicators can indicate a positive trend in standards of living?
	Developed economies have higher economic standards which are based upon certain higher social indicators than developing countries.	<ul style="list-style-type: none"> What differences in social indicators define a developed vs. a non-developed or developing country?
	Higher standards of living can be expressed graphically by the Lorenz Curve and mathematically by the Gini coefficient.	<ul style="list-style-type: none"> What do the Lorenz Curve and the Gini Coefficient tell us? How relevant are they?
	We can understand the effects of various policies and actions by the government through microeconomic and macroeconomic graphs and mathematical calculations. Looking at these graphs and calculations, we can determine the optimal intervention strategy.	<ul style="list-style-type: none"> How/when should imperfect competition be regulated? Should the output be at the socially optimal or fair return points? What is the optimal number of workers or worker technology combinations based on the price of capital? Is there an acceptable amount of deadweight loss? Is there a time when price floors or ceilings are acceptable? How is trade beneficial? Are tariffs ever acceptable?
	KNOWLEDGE	SKILLS

<p>countries because of differences in investment in human and physical capital, research and development, technological change, and from alternative institutional arrangements and incentives.</p> <p>CEE 15:12:2 Historically, economic growth that raises per capita output has been a vehicle for alleviating poverty and raising standards of living.</p> <p>CEE 15:12:3 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.</p> <p>CEE 15:12:4 Lower interest rates encourage investment.</p> <p>CEE 16:12:1 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 as associated with the production or consumption of a product or (3) markets are not competitive.</p> <p>CEE 16:12:2 An important role for government in the economy is to define, establish, and enforce property rights. A</p>	<p>Students will know:</p> <p>The various graphs used to illustrate GDP and national output and inflationary and recessionary gaps AS and AD.</p> <p>The definition of monetary policy and spending, as well as the difference between taxation and automatic stabilizers.</p> <p>The purpose of the Federal Reserve System and fractional banking.</p> <p>The influence of foreign trade and exchange.</p> <p>The definitions and applications of: supply, demand, scarcity, consumer choice, opportunity cost, equilibrium, deadweight loss, ceilings, and floors.</p> <p>The costs of production , including but not limited to ATC, AFC, AVC, MC, and MR.</p> <p>What constitutes perfect competition.</p> <p>What constitutes imperfect Competition including</p>	<p>Via analysis of the problem given and both in writing and visually through graphing where appropriate, students will be able to:</p> <p>Create and analyze graphs for a given macroeconomy; show and address inflationary and recessionary gaps.</p> <p>Analyze how AD and AS change via the shifters of AD and AS.</p> <p>Explain in writing how the United States government uses taxation, spending, and automatic stabilizers to “fix” the economy.</p> <p>Analyze how the Federal Reserve uses OMO, interest rates, and the reserve ratio to “fix” the economy.</p> <p>Analyze and show via graphing what happens to currencies when there are inflationary pressures; how currencies are demanded and how that demand can change.</p> <p>Graph Supply and Demand and analyze the impact of floors and ceilings and the creation of deadweight loss which illustrates inefficiencies.</p> <p>Graph and analyze ATC, AFC, AVC, MC, MR</p> <p>Determine the point of zero (economic) profit and</p>
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<p>property right to a good or service includes the right to exclude others from using the good or service and the right to transfer ownership or use of the resource to others.</p> <p>CEE 16:12:3 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.</p> <p>CEE 16:12:4 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.</p> <p>CEE 16:12:5 When a price fails to reflect all of the benefits of the product, too little of the product is produced and consumed. When a price fails to reflect all the costs of a product, too much of it is produced and consumed. Government can use subsidies to help correct for insufficient output; it can use taxes to help correct for excessive output; or it can regulate output directly to correct for over- or under-production or consumption of a product.</p> <p>CEE 16:12:7 When one producer can supply total output in a</p>	<p>monopoly, monopolistic competition, and oligopoly.</p> <p>The similarities and differences between resources markets.</p> <p>The factors contributing to market failures including income inequality, externalities, and public goods.</p> <p>Economic issues are historical, complex, and multi-faceted.</p> <p>VOCABULARY AND KEY TERMS: There will be no new vocabular. Rather, students will be expected to express all ideas from this point forward, using all of the economic vocabulary and terms that they have learned throughout the year.</p>	<p>the shut-down point.</p> <p>Analyze and graph and determine the monopolists' price and output; identify the socially optimal and fair return prices and outputs; and use Game Theory to determine the optimal choices for the Oligopolist.</p> <p>Analyze and determine the optimal quantity of workers and/or worker/technology combinations based on the cost of capital.</p> <p>Be able to analyze and interpret the Lorenz Curve and understand the significance of the Gini Coefficient; analyze externalities and suggest ways to limit/promote them through government action; and define and explain how to increase public goods and how to determine the optimal amount of a public good.</p> <p>Create a presentation on current economic issues while comparing two countries – one developed (high HDI) and one developing (low HDI).</p>
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<p>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.</p> <p>CEE 16:12:8 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.</p> <p>CEE 16:12:9 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 or services.</p> <p>CEE 16:12:10 Different tax structures affect consumers and producers differently.</p> <p>CEE 16:12:11 Governments provide an alternative to private markets for supplying goods and</p>		
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<p>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.</p> <p>CEE 18:12:1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.</p> <p>CEE 18:12: Incentives exist for political leaders to implement policies that disperse costs widely over large groups of people and benefit small, and politically powerful group of people.</p> <p>SLS 6.2.12.C.6.a Evaluate efforts of governmental, nongovernmental, and international organizations to address economic imbalances and social inequalities.</p> <p>SLS 6.2.12.C.6.c Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.</p> <p>SLS 6.2.12.C.6.d Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.</p> <p>SLS 6.1.12.C.12.d Assess the role of the public and private sectors in promoting</p>		
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economic growth and ensuring economic stability.		
<p>ASSESSMENT EVIDENCE: Students will show their learning in a formative and summative manner by:</p> <ul style="list-style-type: none"> ● Completing assessments (MC and FRQs) showing their comprehensive knowledge of major Microeconomic and Macro Economic topics. ● Completing a 4th Marking Period Benchmark Project – Students will be given two countries, one high HDI (Human Development Index) and one low HDI, and asked to: <ul style="list-style-type: none"> ○ create a Lorenz Curve for each country. ○ provide the Gini Coefficient for both countries. ○ analyze and discuss in writing questions provided. ○ research and provide requested social and economic indicators/measures. ○ create a presentation on their findings. <p>KEY LEARNING EVENTS AND INSTRUCTION:</p> <ul style="list-style-type: none"> ● Students will complete AP Test (Micro and Macro) modules outside of class on Albert.com to prepare for the AP Exams (Micro and Macro). ● Students will complete AP Multiple Choice questions in class in preparation for the AP Exams. ● Students will complete various AP Free Response Questions (“FRQs”) in preparation for the AP Exams. 		

RANDOLPH TOWNSHIP SCHOOL DISTRICT
AP Macroeconomics/ AP Microeconomics
UNIT XI: Review for AP Examination and Marketing Period 4 Benchmark Project
(Project - after the AP exam in May)

SUGGESTED TIME ALLOTMENT	CONTENT-UNIT OF STUDY	SUPPLEMENTAL UNIT RESOURCES
2 Weeks	<p>Macroeconomics Review</p> <ul style="list-style-type: none"> ● GDP=C+I+G+X_n <ul style="list-style-type: none"> ○ Unemployment - – Structural, Frictional, Cyclical ○ Inflation ● AD and AS <ul style="list-style-type: none"> ○ Shifters of AS and AD ○ Fiscal policy – taxation vs. automatic stabilizers ● Fractional Banking <ul style="list-style-type: none"> ○ Reserve ratios and the multiplier ○ “T” accounts and balance sheets ○ Federal Reserve ● Monetary Policy <ul style="list-style-type: none"> ○ OMO open market operations ○ Interest rates ○ Reserve Ratio ● Open Economy and Trade <ul style="list-style-type: none"> ○ Comparative Advantage ○ Trading Currencies ○ Foreign Exchange-Imports/Exports ○ Balance of Payments <ul style="list-style-type: none"> ■ Current Account ■ Capital Account 	<p>Council for Economic Education, <i>Advanced Placement Economics Microeconomics Student Resource Manual</i>, 4th edition ISBN:978-1-56183-670-3</p> <p>Via the internet:</p> <ul style="list-style-type: none"> ● Albert - https://www.albert.io/ ● ACDC Economics - You Tube videos - https://www.youtube.com/user/ACDCLeadership ● ACDC Econ - AP Economics Teacher Resources - http://www.acdcecon.com/econ-teachers-resources ● AP Central Microeconomics https://apcentral.collegeboard.org/courses/ap-microeconomics/exam ● AP Central Macroeconomics https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam ● CIA – The World Fact Book https://www.cia.gov/library/publications/the-world-factbook/index.html ● YouTube – Hans Rosling – Debunking third-world myths with the best stats you’ve ever seen https://www.youtube.com/watch?v=RUwS1uAdUcI ● UN Development Programme – Human Development Reports http://hdr.undp.org/en/data

	<p>Microeconomics Review</p> <ul style="list-style-type: none"> ● Supply/Demand <ul style="list-style-type: none"> ○ Economizing Problem ○ Consumer Choice ○ Opportunity Cost ● The Market and price and output <ul style="list-style-type: none"> ○ Equilibrium ○ Price Ceilings and Floors ● The Firm – $MR=D=AR=P$ <ul style="list-style-type: none"> ○ Costs of production -ATC, AVC, MC, MR ○ Perfect Competition <ul style="list-style-type: none"> ■ Economic profit ● Imperfect Competition <ul style="list-style-type: none"> ○ Pure Monopoly ○ Monopolistic Competition ○ Oligopoly <ul style="list-style-type: none"> ■ Game Theory ● Resource Markets <ul style="list-style-type: none"> ○ Labor Market <ul style="list-style-type: none"> ■ Competitive Labor Market ■ Monopsony ■ Unions ● Market Failures <ul style="list-style-type: none"> ○ Income Inequality <ul style="list-style-type: none"> ■ Lorenz Curve and the Gini Coefficient ■ Taxation – Flat, Regressive, Progressive ○ Externalities – Negative and Positive <ul style="list-style-type: none"> ■ Taxes to reduce ■ Subsidies to increase ○ Free-Ridership ○ Public Goods 	<p>Via print or the internet:</p> <ul style="list-style-type: none"> ● <i>The New York Times</i> ● <i>The Economist</i> ● <i>The Wall Street Journal</i>
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APPENDIX

Standards

- Voluntary National Content Standards in Economics - K-12 Standards. Council for Economic Education 122 East 42nd Street, Suite 2600, New York, NY 10168 <https://www.councilforeconed.org/resource/voluntary-national-content-standards-in-economics/#sthash.0lIfK43.dpbs>

Textbooks

- McConnell, Brue, Flynn, *Economics – Principles, Problems and Policies 19th AP Edition*, McGraw-Hill ISBN: 978-0-07-660178-3
- McConnell, Brue, Flynn, Walstad, *Study Guide for use with Economics, 19th Edition*, McGraw-Hill ISBN: 978-0-07-733792-6

Additional Resources

• Print

- Council for Economic Education, *Advanced Placement Economics Macroeconomics Student Resource Manual, 4th edition* ISBN: 978-1-56183-668-0
- Council for Economic Education, *Advanced Placement Economics Microeconomics Student Resource Manual, 4th edition* ISBN: 978-1-56183-670-3
- Soto, Hernando de. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Basic Books, 2006.

• On-Line

- AP Central Microeconomics Micro - <https://apcentral.collegeboard.org/courses/ap-microeconomics/exam>
- AP Central Macroeconomics Macro - <https://apcentral.collegeboard.org/courses/ap-macroeconomics/exam>
- Albert - <https://www.albert.io/>
- ACDC Leadership – Everything Econ - <https://www.youtube.com/user/ACDCLeadership>
- ACDC Econ - AP Economics Teacher Resources - <http://www.acdcecon.com/econ-teachers-resources>
- CIA – The World Fact Book <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- YouTube – Hans Rosling – Debunking third-world myths with the best stats you’ve ever seen <https://www.youtube.com/watch?v=RUwS1uAdUcI>
- UN Development Programme – Human Development Reports <http://hdr.undp.org/en/data>

• Print or On-Line

- *The Economist*
- *The New York Times*
- *The Wall Street Journal*