



Social Studies Department

Elective Course: AP MACROECONOMICS/Macroeconomics

Developed By: Mr. Joseph Dwyer and Mr. Christopher Bradley

Effective Date: Fall 2021

Scope and Sequence

Unit Number	Unit Name
1	Basic Economic Concepts <ul style="list-style-type: none">• Scarcity, Opportunity Cost, Production Possibilities Curve, Comparative Advantage, Gains from Trade, Demand/Supply, Market Equilibrium
2	Economic Indicators and the Business Cycle <ul style="list-style-type: none">• Circular Flow Model, GDP and Limitations, Unemployment, Price Indices and Inflation, Costs of Inflation, Real v. Nominal GDP, Business Cycles
3	National Income and Price Determination <ul style="list-style-type: none">• Aggregate Demand (AD), Multipliers, Short-Run Aggregate Supply (SRAS), Long-Run Aggregate Supply (LRAS), AD-AS Model, Long-Run Self-Adjustment, Fiscal Policy, Automatic Stabilizers
4	Financial Sector <ul style="list-style-type: none">• Financial Assets, Nominal v. Real Interest Rates, Money, Banking and Expansion of Money Supply, Money Market, Monetary Policy, The Loanable Funds Market
5	Long-Run Consequences of Stabilization Policies <ul style="list-style-type: none">• Fiscal and Monetary Policy Actions-Short Run, The Phillips Curve, Money Growth and Inflation, Government Deficits and the National

	Debt, Crowding Out, Economic Growth, Public Policy and Economic Growth
6	Open Economy -- International Trade and Finance <ul style="list-style-type: none">• Balance of Payments Accounts, Exchange Rates, The Foreign Exchange Market, Real Interest Rates and International Capital Flows

All six units to follow are based on information found in the College Board Course and Exam Description for AP Macroeconomics issued in Fall 2019 as well as the 2020 New Jersey Student Learning Standards for Social Studies.

Unit 1

Basic Economic Concepts

Summary and Rationale

This unit introduces foundational models that will enable students to understand more advanced economic analysis in subsequent units. Resources are scarce and individuals and societies must make choices. Examining how and why these choices are made will help students begin to understand the principles of supply and demand as well as the importance of specialization and exchange.

Recommended Pacing

8-10 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.1.12.EconEM.2.c	Analyze how technological developments transformed the economy, created international markets, and affected the environment in New Jersey and the nation.
6.1.12.EconET.3.a	Relate the wealth of natural resources to the economic development of the United States and to the quality of life of individuals.
6.1.12.EconNE.9.d:	Explain the interdependence of various parts of a market economy (i.e., private enterprise, government programs, and the Federal Reserve System).
6.1.12.EconNM.11.a	Analyze how scientific advancements, including advancements in agricultural technology, impacted the national and global economies and daily life.
6.1.12.EconET.14.a	Use current events to judge what extent the government should intervene at the local, state, and national levels on issues related to the economy.
6.1.12.EconEM.14.a	Relate the changing manufacturing, service, science, and technology industries and educational opportunities to the economy and social dynamics in New Jersey.
6.1.12.HistorySE.14.a	Explore the various ways women, racial and ethnic minorities, the LGBTQ community, and individuals with disabilities have contributed to the American economy, politics and society.
6.1.12.HistorySE.14.b	Use a variety of sources from diverse perspectives to analyze the social, economic and political contributions of marginalized and underrepresented groups and/or individuals.

6.1.12.GeoHE16.a	Explain why natural resources (i.e., fossil fuels, food, and water) continue to be a source of conflict and analyze how the United States and other nations have addressed issues concerning the distribution and sustainability of natural resources and climate change.
6.1.12.EconNE.16.b	Evaluate the economic, political, and social impact of new and emerging technologies on individuals and nations
6.1.12.EconGE.3.a	Analyze how technological developments transformed the economy, created international markets, and affected the environment in New Jersey and the nation.
6.2.12.EconET.3.a	Determine how, and the extent to which, scientific and technological changes, transportation, and new forms of energy brought about social, economic, and cultural changes in the world.
6.2.12.EconET.3.b	Compare the characteristics of capitalism, socialism, and communism to determine why each system emerged and its success in leading to economic growth and stability.
6.2.12.CivicsPI.4.a	Compare and contrast socialism, communism, fascism, and liberal democracy, analyze the extent to which they promote and protect civil, political, social and economic rights for people, and explain the reasons for their growth or decline around the world.
6.2.12.EconET.5.a	Compare and contrast free market capitalism and Western European democratic socialism with Soviet communism.
6.2.12.HistoryCC.5.b	Cite evidence describing the role of boundary disputes and limited natural resources as sources of conflict.
CCSS-ELA - Literacy in History/Social Sciences	
CCSS.ELA-LITERACY .RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
CCSS.ELA-LITERACY .RH.11-12.2	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
CCSS.ELA-LITERACY .RH.11-12.3	Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
CCSS.ELA-LITERACY .RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
CCSS.ELA-LITERACY .RH.11-12.5	Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.
CCSS.ELA-LITERACY .RH.11-12.6	Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
CCSS.ELA-LITERACY .RH.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

CCSS.ELA-LITERACY .RH.11-12.8	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
CCSS.ELA-LITERACY .RH.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
CCSS.ELA-LITERACY .RH.11-12.10	By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.
CCSS-ELA - Writing	
CCSS.ELA-LITERACY .W.11-12.1.A	Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
CCSS.ELA-LITERACY .W.11-12.1.B	Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
CCSS.ELA-LITERACY .W.11-12.1.C	Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY .W.11-12.1.D	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY .W.11-12.1.E	Provide a concluding statement or section that follows from and supports the argument presented.
Instructional Focus	
Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> ● The production possibilities curve (PPC) model is used to demonstrate the full employment level of output and to illustrate changes in full employment. ● Production and consumption increase by engaging in trade. ● In a competitive market, demand for and supply of a good or service determine the equilibrium price. ● Production resources are limited. Therefore, people cannot have all the goods and services they want, and as a result they must make choices. ● Effective decision making requires a comparison of the costs and benefits of alternatives. 	<ul style="list-style-type: none"> ● Why is choice the core element of all economic study? ● How do markets use a price system to efficiently allocate scarce resources? ● What is the appropriate role of government in a free-market economic system?

Unit Inquiry Question(s) → Why is choice the core element of all economic study?

Objectives (SLO)

Students will know:

- Individuals and societies are forced to make choices because most resources are scarce.
- The PPC is a model used to show the tradeoffs associated with allocating resources
- The PPC can be used to illustrate the concepts of scarcity, opportunity cost, efficiency, underutilized resources, and economic growth or contraction.
- The shape of the PPC depends on whether opportunity costs are constant, increasing, or decreasing.
- The PPC can shift because of changes in factors of production as well as changes in productivity/technology.
- Economic growth results in an outward shift of the PPC
- Absolute advantage describes a situation in which an individual, business, or country can produce more of a good or service than any other producer with the same quantity of resources.
- Comparative advantage describes a situation in which an individual, business, or country can produce a good or service at a lower opportunity cost than another producer.
- Production specialization according to comparative advantage results in exchange opportunities that lead to consumption opportunities beyond the PPC. (MKT-1.B.1)
- Comparative advantage and opportunity costs determine the terms of trade for exchange under which mutually beneficial trade can occur. (MKT-1.B.2)
- The law of demand states there is an inverse relationship between price and quantity demanded, leading to a downward-sloping demand curve. (MKT.2.A.1)
- Factors that influence consumer demand, such as changes in consumer income, cause the market demand curve to shift. (MKT-2.B.1)
- The law of supply states there is a positive relationship between price and quantity supplied,

Students will be able to:

- Define scarcity and economic resources.
- Define (using graphs as appropriate) the PPC and related terms
- Explain (using graphs as appropriate) how the PPC illustrates opportunity costs, trade offs, inefficiency, efficiency, and economic growth under various conditions.
- Calculate (using data from PPCs or tables as appropriate) opportunity cost.
- Define absolute advantage and comparative advantage.
- Determine (using data from PPCs or tables as appropriate) absolute and comparative advantage.
- Explain (using data from PPCs or tables as appropriate) how specialization according to comparative advantage with appropriate terms of trade can lead to gains from trade. (MKT-1.B)
- Calculate (using data from PPCs or tables as appropriate) mutually beneficial terms of trade. (MKT-1.B)
- Define (using graphs as appropriate) the law of demand. (MKT-2.A)
- Explain (using graphs as appropriate) the relationship between the price of a good or service and the quantity demanded. (MKT-2.A)
- Explain (using graphs as appropriate) the determinants of demand. (MKT-2.B)
- Define (using graphs as appropriate) the law of supply. (MKT-2.C)
- Explain (using graphs as appropriate) the relationship between the price of a good or service and the quantity supplied. (MKT-2.C)
- Explain (using graphs as appropriate) the determinants of supply. (MKT2.D)
- Define (using graphs as appropriate) market equilibrium. (MKT.2.E)
- Define a surplus and shortage. (MKT-2.F)
- Explain (using graphs as appropriate) how prices adjust to restore equilibrium in markets that are experiencing imbalances (MKT-2.F)

<p>leading to an upward-sloping supply curve (MKT.2.C.1)</p> <ul style="list-style-type: none"> ● Factors that influence producer supply, such as changes in input prices, cause the market supply curve to shift. (MKT2.D.1) ● Equilibrium is achieved at the price at which quantities demanded and supplied are equal. (MKT-2.E.1) ● Whenever markets experience imbalances--creating disequilibrium prices, surpluses, and shortages--market forces drive prices toward equilibrium. (MKT-2.F.1) ● Changes in the determinants of supply and/or demand result in a new equilibrium price and quantity. (MKT2.G.1) 	<ul style="list-style-type: none"> ● Calculate (using graphs as appropriate) the surplus or shortage in the market experience an imbalance (MKT-2.F) ● Explain (using graphs as appropriate) how changes in demand and supply affect equilibrium price and equilibrium quantity. (MKT-2.G)
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Assessment

- AP Classroom Resources
 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

- [Scarcity Sample Lesson](#)
- Comparative Advantage - (Insert Link)
- PPC - (Insert Link)
- Supply/Demand - (Insert Link)

Resources:

- Textbook - *Krugman's Economics for AP* by Margaret Ray and David Anderson
 - Sections 1 & 2 (Modules 1-9)

Technology Tools:

- Chromebooks
- LCD Projectors
- Individual Dry-Erase Boards & Markers

Modifications

Special Education/504 - Modifications and accommodations must be aligned to stated plan and uphold expectations of the plan lawfully. Every student requires a different set of accommodations based upon need. Examples specific to science practice include, but are not limited to:

- Seating in the front of the class
- Assignments in electronic format
- Additional time and separate room for test taking
- Additional time for in-class assignments

ELL -

- Use directed reading activities. Ensure preview of text before assigned/read, provide pre-reading questions about the main idea and offer help utilizing key words.
- Allow the use of Google Translate where appropriate.

Gifted and Talented - Utilize differentiation in the areas of acceleration, enrichment, and grouping. Examples include, but are not limited to:

- Complex, in-depth research assignments
- Independent study where applicable

Active Citizenship in the 21st Century (By the end of Grade 12)

Please select all standards that apply to this unit of study:

- ✓ Act as a responsible and contributing citizen and employee.
- ✓ Apply appropriate academic and technical skills.
- ✓ Attend to personal health and financial well being.
- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.
- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>

Unit 2

Economic Indicators and the Business Cycle

Summary and Rationale

Unit 2 continues to build on the basic economic concepts introduced in the previous unit. Examination of key measures of economic performance (gross domestic product, unemployment, and inflation) will not only help students understand and know their importance but will also be able to apply and explain these concepts. Students will explore the circular flow of inputs and outputs and the money that pays for them. With an understanding of these tools and basic economics models, students will begin to understand how economists use measurements to assess national economic performance and the business cycle.

Recommended Pacing

9-11 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.1.12.HistoryNM.5.b	Analyze the cyclical nature of the economy and the impact of periods of expansion and recession on businesses and individuals.
6.1.12.EconNE.9.a:	Explain how economic indicators are used to evaluate the health of the economy (i.e., gross domestic product, the consumer price index, the national debt, and the trade deficit).
6.1.12.EconNE.9.d:	Explain the interdependence of various parts of a market economy (i.e., private enterprise, government programs, and the Federal Reserve System)
6.1.12.EconNE.13.b	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).
6.1.12.HistoryCC.13.b	Explore the reasons for the changing role of women in the labor force in post-WWII America and determine its impact on society, politics, and the economy.
6.1.12.EconET.14.b	Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the workforce), and government and consumer debt and their impact on society.
6.1.12.EconNE.16.a:	Make evidence-based inferences regarding the impact of technology on the global workforce and on entrepreneurship.

CCSS-ELA - Literacy in History/Social Sciences

CCSS.ELA-LITERACY .RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
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CCSS.ELA-LITERACY	Provide a concluding statement or section that follows from and supports the argument

.W.11-12.1.E	presented.
Instructional Focus	
Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> ● An economy’s performance can be measured by different indicators such as gross domestic product (GDP), the inflation rate, and the unemployment rate. <ul style="list-style-type: none"> ○ The cause of unemployment is either natural or cyclical, and both can be influenced by government policy. ○ The chief causes of inflation are expansionary government policy, and expectations of future inflation. ● The economy fluctuates between periods of expansion and contraction in the short run, but economic growth can occur in the long run. ● One person’s spending is another person’s income, where income is paying for resources to produce output. This relationship is illustrated by the Circular Flow Model. 	<ul style="list-style-type: none"> ● How is economic health most commonly measured, and what are the shortcomings of such a measurement? ● What are the causes and effects of unemployment?
Unit Inquiry Question(s) → How is economic health most commonly measured, and what are the shortcomings of such a measurement?	
Objectives (SLO)	
<p>Students will know:</p> <ul style="list-style-type: none"> ● GDP is a measure of final output of the economy. (MEA-1.A.1) ● GDP as a total flow of income and expenditure can be represented by the circular flow diagram. (MEA-1.A.2) ● There are three ways of measuring GDP: the expenditures approach, the income approach, and the value-added approach. (MEA-1.A.3) ● GDP is a useful indicator of a nation’s economic performance, but it has some limitations, such as failing to account for nonmarket transactions. (MEA-1.B.1) ● The unemployment rate is the percentage of the labor force that is out of work. (MEA-1.C.1) ● The labor force participation rate is another measure of the labor market activity in an economy. The labor force participation rate is the 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● define (using the circular flow diagram as appropriate) how GDP is measured and its components ● calculate nominal GDP ● define the limitations of GDP ● define the labor force, the unemployment rate, and the labor force participation rate ● explain how changes in employment and the labor market affect the unemployment rate and the labor force participation rate ● calculate the unemployment rate and the labor force participation rate ● define the types of unemployment and the natural rate of unemployment ● explain changes in the types of unemployment ● examine the elements of unemployment, how it is measured, and how it is defined

percentage of the adult population that is in the labor force. (MEA-1.C.2)

- The measured unemployment rate is often criticized for understating the level of joblessness because it excludes groups such as discouraged workers and part-time workers. (MEA-1.D.1)
- Economists primarily focus on three types of unemployment: cyclical, frictional, and structural. (MEA-1.E.1)
- The natural rate of unemployment is the unemployment rate that would exist when the economy produces full-employment real output. It is equal to the sum of frictional and structural employment. (MEA-1.E.2)
- The deviation of the actual unemployment rate from the natural rate is cyclical unemployment. (MEA-1.E.3)
- The natural rate of unemployment can gradually change over time because of such things as changes in labor force characteristics. (MEA-1.E.4)
- The consumer price index (CPI) measures the change in income a consumer would need in order to maintain the same standard of living over time under a new set of prices as under the original set of prices. (MEA-1.F.1)
- The CPI measures the cost of a fixed basket of goods and services in a given year relative to the base year. (MEA-1.F.2)
- The inflation rate is determined by calculating the percentage change in a price index, such as CPI or the GDP deflator. (MEA-1.F.3)
- Real variables, such as real wages, are the nominal variables deflated by the price level (MEA-1.F.4)
- The CPI as a measure of inflation has some shortcomings, such as subtraction bias, causing it to overstate the true inflation rate. (MEA-1.G.1)
- Unexpected inflation arbitrarily redistributes wealth from one group of individuals to another group, such as lenders to borrowers. (MEA-1.H.1)
- Real GDP is a measure of how much is spent on output. REal GDP is a measure of how much is produced. (MEA1.I.1)
- Nominal GDP measures aggregate output using current prices. Real GDP measures aggregate

- conclude that the natural unemployment rate is a sum of frictional and structural unemployment, and they will examine the causes, and the mechanisms by which the natural rate can change.
- analyze the enduring feature of the economy characterized by short term fluctuations between expansion and contraction, and known as the business cycle.
- define the consumer price index (CPI), inflation, deflation, disinflation, the inflation rate, and real variables.
- explain how price indices can be used to calculate the inflation rate and to compare nominal variables over time periods.
- calculate the CPI, the inflation rate, and changes in real variables.
- define the shortcomings of the CPI as a true measure of inflation
- explain the costs that unexpected inflation (deflation) imposes on individuals and the economy.
- define nominal GDP and real GDP
- calculate real GDP and the GDP deflator
- define (using graphs and data as appropriate) turning points and phases of the business cycle
- explain (using graphs and data as appropriate) turning points and phases of the business cycle

output using constant prices, thus removing the effect of changes in overall price level. (MEA-1.I.2)

- One way of measuring real GDP is to weigh final goods and services by their prices in a base year. Because this can lead to overstatement of real GDP growth, statistical agencies actually use different methods. (MEA.1.J.1)
- Nominal GDP can be converted to real GDP by using the GDP deflator. (MEA-1.J.2)
- Business cycles are fluctuations in aggregate output and employment because changes in aggregate supply and/or aggregate demand. (MEA-2.A.1)
- The phases of a business cycle are recession and expansion. (MEA-2.A.2)
- The turning points of a business cycle are peak and trough. (MEA-2.A.3)
- The difference between actual output and potential output is the output gap. (MEA-2.A.4)
- Potential output is also called full-employment output. It is the level of GDP where unemployment is equal to the natural rate of unemployment. (MEA-2.A.5)

Assessment

- AP Classroom Resources
 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

- [Circular Flow Model](#)
- Calculating GDP
- Inflation
- Unemployment
- [Graphing the Business Cycle](#)

Resources:

- Textbook - *Krugman's Economics for AP* by Margaret Ray and David Anderson
 - Section 3 (Modules 10-15)

Technology Tools:

- Chromebooks
- LCD Projectors
- Individual Dry-Erase Boards & Markers

Modifications

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- Assignments in electronic format
- Additional time and separate room for test taking
- Additional time for in-class assignments

ELL -

- Use directed reading activities. Ensure preview of text before assigned/read, provide pre-reading questions about the main idea and offer help utilizing key words.
- Allow the use of Google Translate where appropriate.

Gifted and Talented - Utilize differentiation in the areas of acceleration, enrichment, and grouping. Examples include, but are not limited to:

- Complex, in-depth research assignments
- Independent study where applicable

Active Citizenship in the 21st Century (By the end of Grade 12)

Please select all standards that apply to this unit of study:

- ✓ Act as a responsible and contributing citizen and employee.
- ✓ Apply appropriate academic and technical skills.
- ✓ Attend to personal health and financial well being.
- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.
- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>

Unit 3

National Income and Price Determination

Summary and Rationale

Economic indicators and the business cycle explored in the previous unit will be represented and evaluated by students in this unit using the aggregate demand--aggregate supply model. This model helps economists show the effects of spending and production decisions, economic fluctuations, and policy actions on economic outcomes which include: output, income, unemployment, and inflation. Students will have practice drawing and interpreting the model while assessing economic outcomes and look forward to anticipating the effects of policy and other changes.

Recommended Pacing

10-12 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.1.12.EconNE.9.a	Explain how economic indicators are used to evaluate the health of the economy (i.e., gross domestic product, the consumer price index, the national debt, and the trade deficit).
6.1.12.EconNE.9.c:	Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.
6.1.12.EconNE.9.d	Explain the interdependence of various parts of a market economy (i.e., private enterprise, government programs, and the Federal Reserve System).
6.1.12.EconNE.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.
6.1.12.GeoNE.14.a	Use financial and economic data to determine the causes of the financial collapse of 2008 and evaluate the effectiveness of the government's attempts to alleviate the hardships brought on by the Great Recession.
6.1.12.EconET.14.b	Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the workforce), and government and consumer debt and their impact on society.
6.1.12.EconNE.15.a	Assess economic priorities related to international and domestic needs, as reflected in the national budget.
6.1.12.EconNE.16.a	Make evidenced-based inferences regarding the impact of technology on the global workforce and on entrepreneurship.
6.1.12.EconNE.16.b	Evaluate the economic, political, and social impact of new and emerging technologies on individuals and nations.
CCSS-ELA - Literacy in History/Social Sciences	
CCSS.ELA-LITERAC. RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

CCSS.ELA-LITERACY .RH.11-12.2	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
CCSS.ELA-LITERACY .RH.11-12.3	Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
CCSS.ELA-LITERACY .RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
CCSS.ELA-LITERACY .RH.11-12.5	Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.
CCSS.ELA-LITERACY .RH.11-12.6	Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
CCSS.ELA-LITERACY .RH.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
CCSS.ELA-LITERACY .RH.11-12.8	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
CCSS.ELA-LITERACY .RH.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
CCSS.ELA-LITERACY .RH.11-12.10	By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.
CCSS-ELA - Writing	
CCSS.ELA-LITERACY .W.11-12.1.A	Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
CCSS.ELA-LITERACY .W.11-12.1.B	Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
CCSS.ELA-LITERACY .W.11-12.1.C	Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY .W.11-12.1.D	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY .W.11-12.1.E	Provide a concluding statement or section that follows from and supports the argument presented.
Instructional Focus	

Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> ● Economists use the aggregate demand-aggregate supply model to represent the relationship between the price level and aggregate output in an economy and to illustrate how output, employment, and the price level respond to macroeconomic shocks. ● Fiscal and monetary policy have short-run effects on macroeconomics outcomes. 	<ul style="list-style-type: none"> ● How is economic health most commonly measured, and what are the shortcomings of such a measurement? ● Can economic intervention by the government bring positive economic results?
Unit Inquiry Question(s) →	
Objectives (SLO)	
<p>Students will know:</p> <ul style="list-style-type: none"> ● The aggregate demand (AD) curve describes the relationship between the price level and the quantity of goods and services demanded by households (consumption), firms (investment), government (government spending), and the rest of the world (net exports). MOD-2.A.1 ● The negative slope of the AD curve is explained by the real wealth effect, the interest rate effect, and the exchange rate effect. MOD-2.A.2 ● Any change in the components of aggregate demand (consumption, investment, government spending, or net exports) that is not due to changes in the price level leads to a shift of the AD curve. MOD-2.A.3 ● A \$1 change to autonomous expenditures leads to further changes in total expenditures and total output. MOD-2.B.1 ● The expenditure multiplier quantifies the size of the change in aggregate demand as a result of a change in any of the components of aggregate demand. MOD-2.B.2 ● The tax multiplier quantifies the size of the change in aggregate demand as a result of a change in taxes. MOD-2.B.3 ● The expenditure multiplier and tax multiplier depend on the marginal propensity to consume. MOD-2.B.4 ● The marginal propensity to consume is the change in consumer spending divided by the change in disposable income. The sum of the 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Define (using graphs as appropriate) the aggregate demand (AD) curve. ● Explain (using graphs as appropriate) the slope of the AD curve and its determinants. ● Define the expenditure multiplier, the tax multiplier, the marginal propensity to consume, and the marginal propensity to save. ● Explain how changes in spending and taxes lead to changes in real GDP. ● Calculate how changes in spending and taxes lead to changes in real GDP. ● Define (using graphs as appropriate) the short-run aggregate supply (SRAS) curve. ● Explain (using graphs as appropriate) the slope of the SRAS curve and its determinants. ● Explain (using graphs as appropriate) how movement along the SRAS curve implies a relationship between the price level (and inflation) and unemployment. ● Define (using graphs as appropriate) the short run and the long run. ● Define (using graphs as appropriate) the long-run aggregate supply (LRAS). ● Explain (using graphs as appropriate) the short-run and long-run equilibrium price level and output level. ● Explain (using graphs as appropriate) the response of output, employment, and the price level to an aggregate demand or aggregate supply shock in the short run.

marginal propensity to consume and marginal propensity to save is equal to one. MOD-2.B.5

- The short-run aggregate supply (SRAS) curve describes the relationship between the price level and the quantity of goods and services supplied in an economy. MOD-2.C.1
- The SRAS curve is upward sloping because of sticky wages and prices. MOD-2.C.2
- Any factor that causes production costs to change, such as a change in inflationary expectations, will cause the SRAS curve to shift. MOD-2.C.3
- Moving along the SRAS curve, an increase in the price level is associated with an increase in output, which means employment must correspondingly rise. With the labor force held constant, unemployment will fall. So, there is a short-run trade-off between inflation and unemployment. MOD-2.D.1
- In the long run all prices and wages are fully flexible, while in the short run some input prices are fixed. A consequence of flexible long-run prices and wages is the lack of a long-run trade-off between inflation and unemployment.
- The LRAS curve corresponds to the production possibilities curve (PPC) because they both represent maximum sustainable capacity. Maximum sustainable capacity is the total output an economic system will produce over a set period of time if all resources are fully employed.
- The LRAS curve is vertical at the full-employment level of output because in the long run wages and prices fully adjust.
- Short-run equilibrium occurs when the aggregate quantity of output demanded and the aggregate quantity of output supplied are equal--i.e., at the intersection of the AD and SRAS curves. MOD-2.G.1
- Long-run equilibrium occurs when the AD and SRAS curves intersect on the LRAS--i.e., at the full employment level of real output. MOD-2.G.2
- The short-run equilibrium output can be at the full-employment level of output, above it, or below it, creating positive (i.e., inflationary) or negative (i.e., recessionary) output gaps. MOD-2.G.3

- Explain (using graphs as appropriate) the response of output, employment, and the price level to an aggregate demand or aggregate supply shock in the long run.
- Define fiscal policy and related terms.
- Explain (using graphs as appropriate) the short-run effects of a fiscal policy action.
- Calculate the short-run effects of a fiscal policy action.
- Define why there are lags to discretionary fiscal policy.
- Define automatic stabilizers.
- Explain how automatic stabilizers moderate business cycles.

- A positive (negative) shock in AD causes output, employment, and the price level to rise (fall) in the short run. MOD-2.H.1
- A positive (negative) shock in SRAS causes output and employment to rise (fall) and the price level to fall (rise) in the short run. MOD-2.H.2
- Inflation can be caused by changes in aggregate demand (demand-pull) or aggregate supply (cost-push). MOD-2.H.3
- In the long run, in the absence of government policy actions, flexible wages and prices will adjust to restore full employment and unemployment will revert to its natural rate after a shock to aggregate demand or short-run aggregate supply. MOD-2.I.1
- Shifts in the long-run aggregate supply curve indicate changes in the full-employment level of output and economic growth. MOD-2.I.2
- Governments implement fiscal policies to achieve macroeconomic goals, such as full employment. POL-1.A.1
- The tools of fiscal policy are government spending and taxes/transfers. POL-1.A.2
- Changes in government spending affect aggregate demand directly, and changes in taxes/transfers affect aggregate demand indirectly. POL-1.A.3
- The government spending multiplier is greater than the tax multiplier. POL-1.A.4
- Expansionary or contractionary fiscal policies are used to restore full employment when the economy is in a negative (i.e., recessionary) or positive (i.e., inflationary) output gap. POL-1.A.5
- Fiscal policy can influence aggregate demand, real output, and the price level. POL-1.A.6
- The AD-AS model is used to demonstrate the short-run effects of fiscal policy. POL-1.A.7
- In reality, there are lags to discretionary fiscal policy because of factors such as the time it takes to decide on and implement a policy action. POL-1.B.1
- Automatic stabilizers support the economy during recessions and help prevent the economy from being overheated during expansionary periods. POL-1.C.1

<ul style="list-style-type: none"> ● Tax revenues decrease automatically as GDP falls, preventing consumption and the economy from falling further. POL-1.C.2 ● Tax revenues increase automatically as GDP rises, slowing consumption and preventing the economy from overheating. POL-1.C.3 ● Government policies, institutions, or agencies may also have social service programs whose transfer payments act as automatic stabilizers. POL-1.C.4 	
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Assessment

- AP Classroom Resources
 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

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Resources:

- Textbook - *Krugman's Economics for AP* by Margaret Ray and David Anderson
 - Section 4 (Modules 16-21)

Technology Tools:

- Chromebooks
- LCD Projectors
- Individual Dry-Erase Boards & Markers

Modifications

Special Education/504 - Modifications and accommodations must be aligned to stated plan and uphold expectations of the plan lawfully. Every student requires a different set of accommodations based upon need. Examples specific to science practice include, but are not limited to:

- Seating in the front of the class
- Assignments in electronic format
- Additional time and separate room for test taking
- Additional time for in-class assignments

ELL -

- Use directed reading activities. Ensure preview of text before assigned/read, provide pre-reading questions about the main idea and offer help utilizing key words.
- Allow the use of Google Translate where appropriate.

Gifted and Talented - Utilize differentiation in the areas of acceleration, enrichment, and grouping. Examples include, but are not limited to:

- Complex, in-depth research assignments
- Independent study where applicable

Active Citizenship in the 21st Century (By the end of Grade 12)

Please select all standards that apply to this unit of study:

- ✓ Act as a responsible and contributing citizen and employee.
- ✓ Apply appropriate academic and technical skills.
- ✓ Attend to personal health and financial well being.
- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.
- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>

Unit 4

Financial Sector

Summary and Rationale

After exploring the AD-AS model and fiscal policy in the previous unit, students are nearly ready to begin looking at the use of monetary policy and its effects on macroeconomics. However, prior to exploring monetary policy students should first develop a strong understanding of the financial sector, its workings, and how monetary policy is implemented through the banking system. Financial assets, including money, and fractional reserve banking will be introduced as ways in which the money supply can be expanded. A strong understanding of the financial sector will enable students to model both the money market and loanable funds market.

Recommended Pacing

11-13 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.2.12.EconGE.6.a	Evaluate efforts of governmental, non-governmental, and international organizations to address economic imbalances, social inequalities, climate change, health and/or illiteracy.
6.2.12.EconGE.6.b	Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.
6.1.12.EconNE.9.d	Explain the interdependence of various parts of a market economy (i.e., private enterprise, government programs, and the Federal Reserve System).
6.1.12.EconEM.12.a	Assess the role of the public and private sectors in promoting economic growth and ensuring economic stability.
6.1.12.EconNE.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.
6.1.12.EconET.14.a	Use current events to judge what extent the government should intervene at the local, state, and national levels on issues related to the economy.
6.1.12.EconNE.15.a	Assess economic priorities related to international and domestic needs, as reflected in the national budget.
6.1.12.HistoryCC.15.c	Evaluate the effectiveness of United States policies and actions in supporting the economic and democratic growth of developing nations.

6.1.12.HistoryCC.16.a	Assess from various perspectives the effectiveness with which the United States government addresses economic issues that affect individuals, business, and/or other countries.
CCSS-ELA - Literacy in History/Social Sciences	
CCSS.ELA-LITERACY .RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
CCSS.ELA-LITERACY .RH.11-12.2	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
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	reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY .W.11-12.1.D	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY .W.11-12.1.E	Provide a concluding statement or section that follows from and supports the argument presented.

Instructional Focus

Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> ● Money makes it possible to compare the value of goods and services, and interest rates provide a measure of the price of money that is borrowed or saved. ● The banking system plays an important role in the expansion of the money supply. ● In the money market, demand for and supply of money determine the equilibrium nominal interest rate and influence the value of other financial assets. ● Fiscal and monetary policy have short-run effects on macroeconomic outcomes. ● The interaction of borrowers, who demand loanable funds, and savers, who supply loanable funds, determines the equilibrium real interest rate. 	<ul style="list-style-type: none"> ● Should the Fed engage in monetary policy, or should the economy be left to restore its own long-run equilibrium? ● How do decisions made in the loanable funds market help to determine aggregate demand, and therefore, GDP?

Unit Inquiry Question(s) → Can economic intervention by the government bring positive economic results?

Objectives (SLO)

<p>Students will know:</p> <ul style="list-style-type: none"> ● The most liquid forms of money are cash and demand deposits MEA-3.A.1 ● Other financial assets people can hold in place of the most liquid forms of money include bonds (interest-bearing assets) and stocks (equity) MEA-3.A.2 ● The price of previously issued bonds and interest rates on bonds are inversely related MEA-3.A.3 ● The opportunity cost of holding money is the interest rate that could have been earned from holding other financial assets such as bonds MEA-3.A.4 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Define the principal attributes--liquidity, rate of return, and risk--associated with various classes of financial assets, including money. ● Explain the relationship between the price of previously issued bonds and interest rates. ● Define the nominal and real interest rates. ● Explain the relationship between changes in nominal interest rates, expected inflation, and real interest rates. ● Calculate the nominal and real interest rate. ● Define money and its functions. ● Calculate (using data as appropriate) measures of money.
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- A nominal interest rate is the rate of interest paid for a loan, unadjusted for inflation MEA-3.B.1
- Lenders and borrowers establish nominal interest rates as the sum of their expected real interest rate and expected inflation MEA-3.B.2
- A real interest rate can be calculated in hindsight by subtracting the actual inflation rate from the nominal interest rate MEA-3.B.3
- Money is any asset that is accepted as a means of payment MEA-3.C.1
- Money serves as a medium of exchange, unit of account, and store of value MEA-3.C.2
- The money supply is measured using monetary aggregates designated as M1 and M2 MEA-3.C.3
- The monetary base (often labeled as M0 or MB) includes currency in circulation and bank reserves MEA-3.C.4
- Depository institutions (such as commercial banks) organize their assets and liabilities on balance sheets (POL-2.A.1).
- Depository institutions operate using fractional reserve banking (POL-2.A.2).
- Banks' reserves are divided into required reserves and excess reserves (POL-2.A.3).
- Excess reserves are the basis of expansion of the money supply by the banking system (POL-2.A.4).
- The money multiplier is the ratio of the money supply to the monetary base (POL-2.A.5).
- The size of expansion of the money supply depends on the money multiplier (POL-2.A.6).
- The maximum value of the money multiplier can be calculated as the reciprocal of the required reserve ratio (POL-2.A.7).
- The amount predicted by the simple money multiplier may be overstated because it does not take into account a bank's desire to hold excess reserves or the public holding more currency (POL-2.A.8).
- The demand for money shows the inverse relationship between the nominal interest rate and the quantity of money people want to hold (MKT-3.A.1)
- Given a monetary base determined by a country's central bank, money supply is independent of the nominal interest rate (MKT-3.A.2).

- Define key terms related to the banking system and the expansion of the money supply.
- Explain how the banking system creates and expands the money supply.
- Calculate (using data and balance sheets as appropriate) the effects of changes in the banking system.
- Define (using graphs as appropriate) the money market, money demand, and money supply.
- Explain (using graphs as appropriate) the relationship between the nominal interest rate and the quantity of money demanded (supplied).
- Define (using graphs as appropriate) equilibrium in the money market.
- Explain (using graphs as appropriate) how nominal interest rates adjust to restore equilibrium in the money market.
- Explain (using graphs as appropriate) the determinants of demand and supply in the money market.
- Explain (using graphs as appropriate) how changes in demand and supply in the money market affect the equilibrium nominal interest rate.
- Define monetary policy and related terms.
- Explain (using graphs as appropriate) the short-run effects of a monetary policy action.
- Calculate (using data and balance sheets as appropriate) the effects of a monetary policy action.
- Define why there are lags to monetary policy.
- Define (using graphs as appropriate) the loanable funds market, demand for loanable funds, and supply of loanable funds.
- Explain (using graphs as appropriate) the relationship between the real interest rate and the quantity of loanable funds demanded (supplied).
- Define national savings in both a closed and an open economy.
- Define (using graphs as appropriate) equilibrium in the loanable funds market.
- Explain (using graphs as appropriate) how real interest rates adjust to restore equilibrium in the loanable funds market.
- Explain (using graphs as appropriate) how changes in demand and supply in the loanable funds market affect the equilibrium real interest rate and equilibrium quantity of loanable funds.

- In the money market, equilibrium is achieved when the nominal interest rate is such that the quantities demanded and supplied of money are equal (MKT-3.B.1).
- Disequilibrium nominal interest rates create surpluses and shortages in the money market. Market forces drive nominal interest rates toward equilibrium (MKT-3.C.1)
- Factors that shift the demand for money, such as changes in the price level, and supply of money, such as monetary policy, change the equilibrium nominal interest rate (MKT-3.D.1).
- Central banks implement monetary policies to achieve macroeconomic goals, such as price stability (POL-1.D.1)
- The tools of monetary policy include open-market operations, the required reserve ratio, and the discount rate. The most frequently used monetary policy tool is open-market operations (POL-1.D.2).
- When the central bank conducts an open-market purchase (sale), reserves increase (decrease), thereby increasing (decreasing) the monetary base (POL-1.D.3).
- The effect of an open-market purchase (sale) on the money supply is greater than the effect on the monetary base because of the money multiplier (POL-1.D.4).
- Many central banks carry out policy to hit a target range for an overnight interbank lending rate (In the US, this is the federal funds rate) POL-1.D.5.
- Central banks can influence the nominal interest rate in the short run by changing the money supply, which in turn will affect investment and consumption (POL-1.D.6).
- Expansionary or contractionary monetary policies are used to restore full employment when the economy is in a negative (i.e., recessionary) or positive (i.e., inflationary) output gap (POL-1.D.7).
- Monetary policy can influence aggregate demand, real output, the price level, and interest rates (POL-1.D.8).
- A money market model and/or the AD-AS model are used to demonstrate the short-run effects of monetary policy (POL-1.D.9).

<ul style="list-style-type: none"> ● In reality, there are lags to monetary policy caused by the time it takes to recognize a problem in the economy and the time it takes the economy to adjust to the policy action (POL-1.E.1). ● The loanable funds market describes the behavior of savers and borrowers (MKT-4.A.1). ● The demand for loanable funds shows the inverse relationship between real interest rates and the quantity demanded of loanable funds (MKT-4.A.2). ● The supply of loanable funds shows the positive relationship between real interest rates and the quantity supplied of loanable funds (MKT-4.A.3). ● In the absence of international borrowing and lending, national savings is the sum of public savings and private savings (MKT-4.B.1). ● For an open economy, investment equals national savings plus net capital inflow (MKT.4.B.2). ● In the loanable funds market, equilibrium is achieved when the real interest rate is such that the quantities demanded and supplied of loanable funds are equal (MKT-4.C.1). ● Disequilibrium real interest rates create surpluses and shortages in the loanable funds market. Market forces drive real interest rates toward equilibrium (MKT-4.D.1). ● The loanable funds market can be used to show the effects of government spending, taxes, and borrowing on interest rates (MKT-4.E.1). ● Factors that shift the demand (such as an investment tax credit) and supply (such as changes in saving behavior) of loanable funds change the equilibrium interest rate and the equilibrium quantity of funds (MKT-4.E.2). 	
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Assessment

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 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

- Money
- Federal Reserve

Resources:

- Textbook - *Krugman's Economics for AP* by Margaret Ray and David Anderson
 - Section 5 (Modules 22, 23, 25-27)

Technology Tools:

- Chromebooks
- LCD Projectors
- Individual Dry-Erase Boards & Markers

Modifications

Special Education/504 - Modifications and accommodations must be aligned to stated plan and uphold expectations of the plan lawfully. Every student requires a different set of accommodations based upon need. Examples specific to science practice include, but are not limited to:

- Seating in the front of the class
- Assignments in electronic format
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- Additional time for in-class assignments

ELL -

- Use directed reading activities. Ensure preview of text before assigned/read, provide pre-reading questions about the main idea and offer help utilizing key words.
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Gifted and Talented - Utilize differentiation in the areas of acceleration, enrichment, and grouping. Examples include, but are not limited to:

- Complex, in-depth research assignments
- Independent study where applicable

Active Citizenship in the 21st Century (By the end of Grade 12)

Please select all standards that apply to this unit of study:

- ✓ Act as a responsible and contributing citizen and employee.
- ✓ Apply appropriate academic and technical skills.
- ✓ Attend to personal health and financial well being.
- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.

- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>

Unit 5

Long-Run Consequences of Stabilization Policies

Summary and Rationale

Students will build on economic concepts (GDP, price level, and employment status) and models developed in previous units to examine the long-run implications of policy action and economic growth. The Phillips curve will be used to model both the short run and long run relationship between inflation and unemployment.

Recommended Pacing

8-10 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.2.12.EconET.3.a	Determine how, and the extent to which, scientific and technological changes, transportation, and new forms of energy brought about social, economic, and cultural changes in the world.
6.2.12.EconGE.5.a	Evaluate the role of the petroleum industry in world politics, the global economy, and the environment.
6.2.12.CivicsPI.6.a	Use historic case studies or a current event to assess the effectiveness of multinational organizations in attempting to solve global issues.
6.2.12.GeoPP.6.a	Make evidence-based inferences to determine the global impact of increased population growth, migration, and changes in urban-rural populations on natural resources and land use.
6.2.12.EconGE.6.a	Evaluate efforts of governmental, non-governmental, and international organizations to address economic imbalances, social inequalities, climate change, health and/or illiteracy.
6.2.12.EconGE.6.b	Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.
6.1.12.EconNE.9.c	Explain how government can adjust taxes, interest rates, and spending and use other policies to restore the country's economic health.
6.1.12.EconEM.12.a	Assess the role of the public and private sectors in promoting economic growth and ensuring economic stability.

6.1.12.EconEM.10.a	Construct a claim that evaluates short- and long-term impact of the expanded role of government on economic policy, capitalism, and society.
6.1.12.EconNE.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.
6.1.12.EconET.14.a	Use current events to judge what extent the government should intervene at the local, state, and national levels on issues related to the economy.
6.1.12.EconET.14.b	Analyze economic trends, income distribution, labor participation (i.e., employment, the composition of the workforce), and government and consumer debt and their impact on society.
6.1.12.EconNE.15.a	Assess economic priorities related to international and domestic needs, as reflected in the national budget.
6.1.12.HistoryCC.15.c	Evaluate the effectiveness of United States policies and actions in supporting the economic and democratic growth of developing nations.
6.1.12.EconNE.16.a	Make evidence-based inferences regarding the impact of technology on the global workforce and on entrepreneurship.
6.1.12.EconNE.16.b	Evaluate the economic, political, and social impact of new and emerging technologies on individuals and nations.
6.1.12.HistoryCC.16.a	Assess from various perspectives the effectiveness with which the United States government addresses economic issues that affect individuals, business, and/or other countries.
CCSS-ELA - Literacy in History/Social Sciences	
CCSS.ELA-LITERACY .RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
CCSS.ELA-LITERACY .RH.11-12.2	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
CCSS.ELA-LITERACY .RH.11-12.3	Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
CCSS.ELA-LITERACY .RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
CCSS.ELA-LITERACY .RH.11-12.5	Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.
CCSS.ELA-LITERACY .RH.11-12.6	Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
CCSS.ELA-LITERACY	Integrate and evaluate multiple sources of information presented in diverse formats and

.RH.11-12.7	media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
CCSS.ELA-LITERACY .RH.11-12.8	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
CCSS.ELA-LITERACY .RH.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
CCSS.ELA-LITERACY .RH.11-12.10	By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.

CCSS-ELA - Writing

CCSS.ELA-LITERACY .W.11-12.1.A	Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
CCSS.ELA-LITERACY .W.11-12.1.B	Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
CCSS.ELA-LITERACY .W.11-12.1.C	Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY .W.11-12.1.D	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY .W.11-12.1.E	Provide a concluding statement or section that follows from and supports the argument presented.

Instructional Focus

Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> • Fiscal and monetary policy have short-run effects on macroeconomic outcomes. • The Phillips curve model is used to represent the relationship between inflation and unemployment and to illustrate how macroeconomic shocks affect inflation and unemployment. • There are long-run implications of monetary and fiscal policy. • The economy fluctuates between periods of expansion and contraction in the short run, but economic growth can occur in the long run. 	<ul style="list-style-type: none"> • Do the benefits of fiscal policy outweigh the costs?

<ul style="list-style-type: none"> • The production possibilities curve (PPC) model is used to demonstrate the full employment level of output to illustrate changes in employment. • Authorities and organizations institute policies that affect economic growth. 	
Unit Inquiry Question(s) →	
Objectives (SLO)	
<p>Students will know:</p> <ul style="list-style-type: none"> • A combination of expansionary or contractionary fiscal and monetary policies may be used to restore full employment when the economy is in a negative (i.e., recessionary) or positive (i.e., inflationary) output gap (POL-1.F.1) • A combination of fiscal and monetary policies can influence aggregate demand, real output, the price level, and interest rates (POL-1.F.2). • The short-run trade-off between inflation and unemployment can be illustrated by the downward-sloping short-run Phillips curve (SRPC). MOD-3.A.1 • An economy is always operating somewhere along the SRPC (MOD-3.A.2). • The long-run relationship between inflation and unemployment can be illustrated by the long-run Phillips curve (LRPC), which is vertical at the natural rate of unemployment (MOD-3.A.3). • Long-run equilibrium corresponds to the intersection of the SRPC and the LRPC (MOD-3.A.4). • Points to the left of the long-run equilibrium represent inflationary gaps, while points to the right of long-run equilibrium represent recessionary gaps (MOD-3.A.5). • Demand shocks correspond to movement along the SRPC (MOD-3B.1). • Supply shocks correspond to shifts of the SRPC (MOD-3.B.2). • Factors that cause the natural rate of unemployment to change will cause LRPC to shift (MOD-3.B.3). • Inflation (deflation) results from increasing (decreasing) the money supply at too rapid of a rate for a sustained period of time (POL-3.A.1). 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Explain (using graphs as appropriate) the effects of combined fiscal and monetary actions. • Define (using graphs as appropriate) the short-run Phillips curve and the long-run Phillips curve. • Explain (using graphs as appropriate) short-run equilibrium in the Phillips curve model. • Explain (using graphs as appropriate) the response of unemployment and inflation in the short run and in the long run. • Explain (using graphs as appropriate) how inflation is a monetary phenomenon. • Define the quantity theory of money. • Calculate the money supply, velocity, the price level, and real output using the quantity theory of money. • Define the government budget surplus (deficit) and national debt. • Explain the issues involved with the burden of the national debt. • Define crowding out. • Explain (using graphs as appropriate) how fiscal policy may cause crowding out. • Define measures and determinants of economic growth. • Explain (using graphs and data as appropriate) the determinants of economic growth. • Calculate (using graphs and data as appropriate) per capita GDP and economic growth. • Explain (using graphs as appropriate) how the PPC is related to the long-run aggregate supply (LRAS) curve. • Explain (using graphs as appropriate) public policies aimed at influencing long-run economic growth. • Define supply-side fiscal policies.

- When the economy is at full employment, changes in the money supply have no effect on real output in the long run (POL-3A.2).
- In the long run, the growth rate of the money supply determines the growth rate of the price level (inflation rate) according to the quantity theory of money (POL-3.A.3).
- The government budget surplus (deficit) is the difference between tax revenues and government purchases plus transfer payments in a given year (POL-3.B.1).
- A government adds to the national debt when it runs a budget deficit (POL-3.B.2).
- A government must pay interest on its accumulated debt, thus increasing the national debt and increasing forgoing using those funds for alternative uses (POL-3.B.3).
- When a government is in budget deficit, it typically borrows to finance its spending (POL-3.C.1).
- A loanable funds market model can be used to show the effect of government borrowing on the equilibrium real interest rate and the resulting crowding out of private investment (POL-3.C.2).
- Crowding out refers to the adverse effect of increased government borrowing, which leads to decreased levels of interest-sensitive private sector spending in the short-run (POL-3.C.3).
- A potential long-run impact of crowding out is a lower rate of physical capital accumulation and less economic growth as a result (POL-3.C.4).
- Economic growth can be measured as the growth rate in real GDP per capita over time (MEA-2.B.1).
- Aggregate employment and aggregate output are directly related because firms need to employ more workers in order to produce more output, holding other factors constant. This is captured by the aggregate production function (MEA-2.B.3).
- Output per employed worker is a measure of average labor productivity (MEA-2.B.3).
- Productivity is determined by the level of technology and physical and human capital per worker (MEA-2.B.4).
- The aggregate production function shows that output per capita is positively related to both

physical and human capital per capita (MEA-2.B.5).

- An outward shift in the PPC is analogous to a rightward shift of the long-run aggregate supply curve (MOD-1.B.1).
- Public policies that impact productivity and labor force participation affect real GDP per capita and economic growth (POL-4.A.1).
- Government policies that invest in infrastructure and technology affect growth (POL-4.A.2).
- Supply-side fiscal policies affect aggregate demand, aggregate supply, and potential output in the short run and long run by influencing incentives that affect household and business economic behavior (POL-4.A.3).

Assessment

- AP Classroom Resources
 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

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Resources:

- Textbook - *Krugman's Economics for AP* by Margaret Ray and David Anderson
 - Section 6 (Modules 30-36)
 - Section 7 (Modules 37-40)

Technology Tools:

- Chromebooks
- LCD Projectors
- Individual Dry-Erase Boards & Markers

Modifications

Special Education/504 - Modifications and accommodations must be aligned to stated plan and uphold expectations of the plan lawfully. Every student requires a different set of accommodations based upon need. Examples specific to science practice include, but are not limited to:

- Seating in the front of the class
- Assignments in electronic format
- Additional time and separate room for test taking
- Additional time for in-class assignments

ELL -

- Use directed reading activities. Ensure preview of text before assigned/read, provide pre-reading questions about the main idea and offer help utilizing key words.
- Allow the use of Google Translate where appropriate.

Gifted and Talented - Utilize differentiation in the areas of acceleration, enrichment, and grouping. Examples include, but are not limited to:

- Complex, in-depth research assignments
- Independent study where applicable

Active Citizenship in the 21st Century (By the end of Grade 12)

Please select all standards that apply to this unit of study:

- ✓ Act as a responsible and contributing citizen and employee.
- ✓ Apply appropriate academic and technical skills.
- ✓ Attend to personal health and financial well being.
- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.
- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>

Unit 6

Open Economy -- International Trade and Finance

Summary and Rationale

This unit introduces students to the open economy and ways in which countries interact with the rest of the world through exchanges of products and financial markets. Students will recognize that economic policy actions studied in the previous units may impact a country's exchange rate and the value of its currency. Development of the exchange rate model and its interpretation will help students to further understand the effects of economic policy.

Recommended Pacing

5-7 Class Periods

Standards

NJSLS ([SEE HERE](#))

6.2.12.EconET.3.a	Determine how, and the extent to which, scientific and technological changes, transportation, and new forms of energy brought about social, economic, and cultural changes in the world.
6.2.12.EconGI.3.b	Construct a claim based on evidence regarding the interrelationships between the Industrial Revolution, nationalism, competition for global markets, imperialism, and natural resources in different regions of the world.
6.2.12.EconGE.5.a	Evaluate the role of the petroleum industry in world politics, the global economy, and the environment.
6.2.12.CivicsPI.6.a	Use historic case studies or a current event to assess the effectiveness of multinational organizations in attempting to solve global issues.
6.2.12.CivicsHR.6.b	Make an evidence-based argument on the tensions between national sovereignty and global priorities regarding economic development and environmental sustainability and its impact on human rights.
6.2.12.GeoPP.6.a	Make evidence-based inferences to determine the global impact of increased population growth, migration, and changes in urban-rural populations on natural resources and land use.
6.2.12.EconGE.6.a:	Evaluate efforts of governmental, non-governmental, and international organizations to address economic imbalances, social inequalities, climate change, health and/or illiteracy.
6.2.12.EconGE.6.b:	Assess the role government monetary policies, central banks, international investment, and exchange rates play in maintaining stable regional and global economies.

6.1.12.EconEM.12.a	Assess the role of the public and private sectors in promoting economic growth and ensuring economic stability.
6.1.12.EconET.14.a	Use current events to judge what extent the government should intervene at the local, state, and national levels on issues related to the economy.
6.1.12.HistoryCC.15.c	Evaluate the effectiveness of United States policies and actions in supporting the economic and democratic growth of developing nations.
6.1.12.EconGE.16.a	Use quantitative data and other sources to assess the impact of international trade, global business organizations, and overseas competition on the United States economy and workforce.
6.1.12.HistoryCC.16.a	Assess from various perspectives the effectiveness with which the United States government addresses economic issues that affect individuals, business, and/or other countries.
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CCSS.ELA-LITERACY .W.11-12.1.D	Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY .W.11-12.1.E	Provide a concluding statement or section that follows from and supports the argument presented.
Instructional Focus	
Enduring Understandings:	Essential Question(s):
<ul style="list-style-type: none"> Foreign trade accounting measures the flow of goods, services, and financial capital between countries. The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries. 	<ul style="list-style-type: none"> Why does the exchange rate reflect the flow of money between national economies?
Unit Inquiry Question(s) →	
Objectives (SLO)	
<p>Students will know:</p> <ul style="list-style-type: none"> The current account (CA) records net exports, net income from abroad, and net unilateral transfers (MEA-4.A.1). The CA is not always balanced; it may show a surplus or a deficit. A nation's balance of trade (i.e., net exports) is part of the current account and may also show a surplus or a deficit (MEA.4.A.2). 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Define the current account (CA), the capital and financial account (CFA), and the balance of payments (BOP). Explain how changes in the components of the CA and CFA affect a country's BOP. Calculate the CA, CFA, and the BOP. Define the exchange rate, currency appreciation, and currency depreciation. Explain how currencies are valued relative to one another.

- The capital and financial account (CFA) records financial capital transfers and purchases and sales of assets between countries (MEA-4.A.3).
- The CFA is not always balanced; it may show a surplus (financial capital inflow) or a deficit (financial capital outflow) MEA-4.A.4.
- The balance of payments (BOP) is an accounting system that records a country's international transactions for a particular time period. It consists of the CA and the CFA (MEA-4.A.5).
- Any transaction that causes money to flow into a country is a credit to its BOP account, and any transaction that causes money to flow out is a debit. The sum of all credit entries should match the sum of all debit entries (CA+CFA=0) MEA-4.A.6.
- In the foreign exchange market, one currency is exchanged for another; the price of one currency in terms of the other is the exchange rate (MKT-5.A.1).
- If one currency becomes more valuable in terms of the other, it is said to appreciate. If one currency becomes less valuable in terms of the other, it is said to depreciate (MKT-5.A.2).
- The demand for a currency in a foreign exchange market arises from the demand for the country's goods, services, and financial assets and shows the inverse relationship between the exchange rate and the quantity demanded of a currency (MKT-5.B.1).
- The supply of a currency in a foreign exchange market arises from making payments in other currencies and shows the positive relationship between the exchange rate and the quantity supplied of a currency (MKT-5.B.2).
- In the foreign exchange market, equilibrium is achieved when the exchange rate is such that the quantities demanded and supplied of the currency are equal (MKT-5.C.1).
- Disequilibrium exchange rates create surpluses and shortages in the foreign exchange market. Market forces drive exchange rates toward equilibrium (MKT-5.D.1).
- Factors that shift the demand for a currency (such as the demand for that country's goods, services, or assets) and the supply of a currency (such as tariffs or quotas on the other country's

- Calculate the value of one currency relative to another.
- Define the foreign exchange market, demand for currency, and supply of currency.
- Explain (using graphs as appropriate) the relationship between the exchange rate and the quantity of currency demanded (supplied).
- Define (using graphs as appropriate) the equilibrium exchange rate.
- Explain (using graphs as appropriate) how exchange rates adjust to restore equilibrium in the foreign exchange market.
- Explain (using graphs as appropriate) the determinants of currency demand and supply.
- Explain (using graphs as appropriate) how changes in demand and supply in the foreign exchange market affect the equilibrium exchange rate.
- Explain (using graphs as appropriate) how changes in the value of a currency can lead to changes in a country's net exports and aggregate demand.
- Explain (using graphs as appropriate) how differences in real interest rates across countries affect financial capital flows, foreign exchange markets, and loanable funds markets.

goods and services) change the equilibrium exchange rate (MKT-5.E.1).

- Fiscal policy can influence aggregate demand, real output, the price level, and exchange rates (MKT-5.E.2).
- Monetary policy can influence aggregate demand, real output, the price level, and interest rates, and thereby affect exchange rates (MKT-5.E.3).
- Factors that cause a currency to appreciate cause that country's exports to decrease and its imports to increase. As a result, net exports will decrease (MKT-5.F.1).
- Factors that cause a currency to depreciate cause that country's exports to increase and its imports to decrease. As a result, net exports will increase (MKT-5.F.2).
- In an open economy, differences in real interest rates across countries change the relative values of domestic and foreign assets. Financial capital will flow toward the country with the relatively higher interest rate (MKT-5.G.1).
- Central banks can influence the domestic interest rate in the short run, which in turn will affect net capital inflows (MKT-5.G.2).

Assessment

- AP Classroom Resources
 - Unit Personal Progress Check
 - Sample Multiple Choice Questions
 - Sample Free Response Questions
- Student Presentations & Participation, Small Group Activities, Current Event Discussions, Peer Review and Instructor Review of Graphing

Suggested Documents, Resources, & Technology Tools

Documents (Please provide embedded links to documents):

-

Resources:

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- ✓ Communicate clearly and effectively and with reason.
- ✓ Consider the environmental, social and economic impacts of decisions.
- ✓ Demonstrate creativity and innovation.
- ✓ Employ valid and reliable research strategies.
- ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- ✓ Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- ✓ Use technology to enhance productivity.
- ✓ Work productively in teams while using cultural global competence.

Suggestions on integrating these standards can be found at: <http://www.state.nj.us/education/cccs/2014/career/9.pdf>