Verona Public School District
Curriculum Overview

AP Macroeconomics

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Verona Public Schools
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Verona Public Schools Mission Statement:

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

Course Description:

This course is an introduction to macroeconomics and each student is expected to take the AP Macroeconomics Exam that is administered in May. AP Macroeconomics focuses on the economy as a whole, including economic measures, economic growth, fiscal policy, monetary policy, and international economics. AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

Prerequisite(s):

None

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

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

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

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

AP Macroeconomics

Unit 1: *Basic Economic Concepts (Krugman 1,3,4,5,6,7)*	Duration: 3 weeks

STAGE 1: DESIRED RESULTS

Established Goals:

National Content Standard(s) In Economics addressed:

1.1 Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.
1.2 Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset or supplement the initial effects of the decision.
2.1 To produce the profit maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.
2.3 To compare marginal benefits with marginal costs that are realized at different times, benefits and costs must be adjusted to reflect their values at the time a decision is made about them. The adjustment reflects expected returns to investment compounded over time.
2.4 Costs that have already been incurred and benefits that have already been received are sunk benefits and irrelevant for decisions about the future.
2.5 People sometimes fail to treat gains and losses equally, placing extra emphasis on losses.
2.6 Some decisions involve taking risks in that either the benefits or the costs could be uncertain. Risk taking carries a cost. When risk is present, the costs should be treated as higher than when risk is not present.
2.7 Risk can be reduced by diversification
3.1 Comparing the benefits and costs of different allocation methods in order to choose the method that is most appropriate for some specific problem can result in more effective allocations and a more effective overall allocation system.
3.2 Changing the distribution of income or wealth will cause the allocation of resources to change.
4.1 Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide them the highest possible net benefits.
4.2 Decision making in small and large firms, labor unions, educational institutions, ad not-for-profit organizations has different goals and faces different rules and constraints.These goals, rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior.
4.3 People tend to respond to fair treatment with fair treatment and to unfair treatment with retaliation, even when such reactions may not maximize their material wealth.
5.1 Imports are paid for by exports, savings or borrowing.
5.2 When imports are restricted by public policies, consumers pay higher prices and job opportunities and profits in exporting firms may increase.
6.1 Individuals and nations have a comparative advantage in the production of goods or services if they can produce a product at a lower opportunity cost than other individuals or nations.

6.2 International trade stems mainly from factors that confer comparative advantage, including international differences in the availability of productive resources and differences in relative prices. 6.3 Transaction costs are costs (not to be confused with the price of a good or service) that are associated with the purchase of a good or service, such as the cost of locating buyers or sellers, negotiating the terms of an exchange, and insuring that the exchange occurs on the agreed upon terms. When transaction costs decrease, trade increases. 6.4 The goods or services that an individual, region, or nation can produce at lowest opportunity cost depend on many factors (which may vary over time), including available resources, technology, and political and economic institutions. 14.3 Productivity and efficiency gainst that result from innovative practices of entrepreneurs foster long term economic growth.
Transfer
Transfer Goal: *Students will be able to independently use their learning to...* *Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.* *In this unit…* *Students will solve real-world problems involving scarcity, marginal analysis and comparative advantage..*
Meaning

Enduring Understandings	**Essential Questions**
Students will understand that: ● Economic resources are limited/scarce which implies that the goods/services they produce are limited. ● Scarcity requires that choices be made. ● All decisions involve costs. A decision involves future costs. ● Marginal Analysis weighs the benefits against the costs. ● Economies should specialize in those products in which they have a comparative advantage. ● Sound economic choices take into account the complex interaction of human and market behaviors. ● The introduction of new scientific and technological innovations can alter the means of production, the cost of production,and the distribution of services and goods through demand changes.	● How does economics affect everyone? ● How do we make good economic choices? ● Why do people specialize? ● How can individuals, groups, and societies apply economic reasoning to make difficult choices about scarce resources? ● What are the possible consequences of these decisions for individuals, groups, and societies? ● How have scientific and technological developments over the course of history changed the way people live and economies and governments function? ● What factors are considered in economic decision making?

Acquisition of Knowledge & Skills	
Students will know:	**Students will be able to:**
● How scarcity and choice are central to the study of economics ● How property rights and incentives cause economies to differ from command economies.	● Define the science of economics. ● Distinguish between opportunity cost, scarcity and trade offs. ● Distinguish between macroeconomics and microeconomics ● List the three basic economic questions.

• The importance of opportunity cost and marginal analysis in individual choice and decision making • The difference between positive economics and normative economics • When economists agree and why they sometimes disagree • How the production possibilities model helps economists think about the trade-offs every economy faces. • How the production possibilities model helps us understand three important aspects of the real economy: efficiency, opportunity cost, and economic growth. • How trade leads to gains for an individual and for national economies. • The important distinction between absolute advantage and comparative advantage. • How comparative advantage leads to gains from trade in the global marketplace	• Identify opportunity costs in given scenarios. • Draw a production possibility curve (PPC) that demonstrates increasing opportunity costs. • Model comparative advantage in graph form and interpret the results as it relates to trade. • Construct production possibilities frontiers and decipher given ones. • List the determinants of demand and supply. • Recognize which factors will cause demand curves or supply curves to shift. • Distinguish between changes in quantity demanded and a change in demand. • Distinguish between changes in quantity supplied and a change in supply. • Determine effects on price and quantity when equilibrium changes.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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

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

AP Macroeconomics

Unit 2: *Macroeconomic Measures (Krugman 2,10,11,12,13,14,15)*	**Duration:** 4 weeks

STAGE 1: DESIRED RESULTS

Established Goals:

National Content Standard(s) In Economics addressed:

11.3 The consumer price index (CPI) is the most commonly used measure of price-level changes. It can be used to compare the price level in one year with price levels in earlier or later periods.
11.4 The annual inflation rate is the percentage change in the average prices of goods and services over a twelve month period.
11.5 In the long-run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.
18.1 An increase in nominal GDP may reflect increases in the production of goods and services and also increases in prices. GDP adjusted for price changes is "real GDP." Real GDP per capita is a basis for comparing material living standards over time and among different countries
18.2 The potential level of real GDP for a nation is determined by such things as the size and skills of its labor force, the size and quality of its stock of capital goods, the quantity and quality of its natural resources, its technological capabilities, and its legal and cultural institutions
18.3 A business cycle involves fluctuations of real GDP around its potential level.
18.4 Fluctuations of real GDP around its potential level occur when overall spending declines, as in a recession, or when overall spending increases rapidly, as in recovery from a recession or in an expansion.
18.5 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.
19.1 The unemployment rate is an 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.
19.5 Changes in total employment are an important indicator of economic performance and influence levels of real GDP.
19.6 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.
19.7 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.

Transfer:

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

In this unit…
Students will solve real-world problems involving macroeconomic measures gross domestic product, unemployment, inflation and to quantify and interpret the foundational measures of economic performance.

Meaning

Enduring Understandings

Students will understand that:

- Economists use foundational measures of economic performance to determine the size of the macroeconomy in order to efficiently implement stabilization and growth policies.
- Sound economic choices take into account the complex interaction of human and market behaviors.

Essential Questions

- What are politicians talking about?
- Why does unemployment matter to how well the economy is working?

Acquisition of Knowledge & Skills

Students will know:

- What a business cycle is and why policy makers seek to diminish the severity of business cycles.
    - How employment and unemployment are measured and how they change over the business cycle.
    - What aggregate output is and how it changes over the business cycle.
    - The definition of inflation and deflation and why price stability is preferred.
- The components of the circular flow model.
- Explain how economists use aggregate measures to track the performance of the economy; these measures include GDP, Price Indices, Inflation, Unemployment.
- Summarize the crucial role of models—simplified representations of reality—in economics.

Students will be able to:

- Describe how employment and unemployment are measured and how they change over the business cycle.
- Define aggregate output and explain how it changes over the business cycle.
- Define inflation and deflation and explain why price stability is preferred.
- Explain how economic growth determines a country's standard of living.
- Draw and interpret a circular-flow model.
- Define gross domestic product using the expenditure and income approaches.
- Define, Calculate and Interpret Economic Aggregate Measures
    - GDP
        - Define and calculate gross domestic product, or GDP
        - Distinguish between nominal GDP and real GDP
        - Explain the limitations of GDP measures
        - Distinguish between actual and potential GDP
            - Explain why real GDP is the appropriate measure of real economic activity
    - Price Indices
        - Explain what a price index is and how it is calculated

	■ How to utilize price indices to calculate real wages and real interest rates ■ How the effects of inflation affect various groups of consumers and others ■ Describe the importance of the consumer price index and other price indexes ○ Unemployment ■ How to define and categorize the types of unemployment ■ How to calculate the unemployment rate ■ How to define the labor force participation rate ■ How to identify the full employment level of GDP ■ Summarize the significance of the unemployment rate for the economy ■ Explain the relationship between the unemployment rate and economic growth ■ Explain the three different types of unemployment and their causes ■ Identify the factors that determine the natural rate of unemployment ○ Inflation ■ Calculate the rate of inflation ■ Specify the economic costs of inflation ■ Identify who is helped and who is hurt by inflation ■ Explain why policy makers try to maintain a stable rate of inflation ● Differentiate between real and nominal values of income, wages, and interest rates ● Discuss the problems of deflation and disinflation

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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

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

AP Macroeconomics

Unit 3: *AD,AS, Fiscal Policy, and Growth (Krugman 16,17,18,19,20,21,37,38,39,40)*	**Duration:** 8 weeks
STAGE 1: Desired Results	

Established Goals:

National Content Standard(s) In Economics addressed:

11.4 The annual inflation rate is the percentage change in the average prices of goods and services over a twelve month period.
11.5 In the long-run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.
12.1 The real interest rate is the nominal or current market interest rate minus the rate of inflation.
12.2 Higher real interest rates increase the rewards for saving and make borrowing more expensive.
12.7 Expectations of increased inflation may lead to higher interest rates.
14.3 Productivity and efficiency gains that result from innovative practices of entrepreneurs foster long term economic growth.
15.1 Economic growth is a sustained rise in a nation's production of goods and services. Long term growth in output results from improvements in labor productivity and increases in employment. It varies across countries because of differences in investments in human and physical capital, research and development, technological change, and from alternative institutional arrangements and incentives.
15.2 Historically, economic growth that raises per capita output has been a vehicle for alleviating poverty and raising standards of living.
15.4 Lower interest rates encourage investment.
15.5 The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).
16.2 An important role for government in the economy is to define, establish, and enforce property rights. A property right to a good or service includes the right to exclude others from using the good or service and the right to transfer the ownership or use of the resource to others.
16.5 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 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.
16.6 In the United States, the federal government enforces antitrust laws and regulations to try to maintain effective levels of competition; however, laws and regulations can also have unintended effects of reducing competition
16.8 Government laws establish the rules and institutions in which markets operate. These include such things as property rights, collective bargaining rules, laws about discrimination, and laws regulating marriage and family life.
16.10 Different tax structures affect consumers and producers differently.
16.11 Governments provide an alternative to private markets for supplying goods and services when it appears that the benefits to society of doing so outweigh the costs to society. Not all individuals will bear the same costs or share the same benefits of those policies.
17.1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.
17.2 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.

17.3 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.
17.4 Price controls, occupational licensing, and reductions in antitrust enforcement are often advocated by special interest groups. Price controls can reduce the quantity of goods and services produced, thus depriving consumers of some goods and services whose value would exceed their cost.
18.1 An increase in nominal GDP may reflect increases in the production of goods and services and also increases in prices. GDP adjusted for price changes is "real GDP." Real GDP per capita is a basis for comparing material living standards over time and among different countries.
18.2 The potential level of real GDP for a nation is determined by such things as the size and skills of its labor force, the size and quality of its stock of capital goods, the quantity and quality of its natural resources, its technological capabilities, and its legal and cultural institutions.
18.3 A business cycle involves fluctuations of real GDP around its potential level.
18.4 Fluctuations of real GDP around its potential level occur when overall spending declines, as in a recession, or when overall spending increases rapidly, as in recovery from a recession or in an expansion.
18.5 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.
20.1 Fiscal policies are decisions to 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.
20.2 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 price levels and interest rates, but they reduce employment and output levels in the short run.
20.3 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.
20.4 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
20.5 When the government runs a budget deficit, it must borrow to finance that deficit.
20.6 The national debt is the accumulated sum of all its past annual deficits and surpluses.

Transfer

Transfer Goal:

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

In this unit…
Students will solve real-world problems involving aggregate demand, aggregate supply, fiscal policy and growth policy.

Meaning

Enduring Understandings

Students will understand that:

- Economists use foundational measures of economic performance to determine the pace of long-run growth and how the government can create policies that can help or hinder growth and evaluate environmental sustainability of growth.
- Economic systems have unique characteristics and vary in the level of control over market influences.
- Markets are influenced by international,national and individual choice making.

Essential Questions

- How much debt is too much?
- What factors are considered in economic decision making?
- Why are some nations rich and others poor?
- Will a model make a complicated idea easier to understand?

Acquisition of Knowledge & Skills

Students will know:

- The multiplier process by which initial changes in spending lead to further changes in spending.
- The differences between short-run and long-run macroeconomic equilibrium.
- How the AD–AS model is used to formulate macroeconomic policy.
- How automatic stabilizers influence the multiplier effect.
- Interpret measures of long-run economic growth.
- How real GDP has changed over time.
- How real GDP varies across countries.
- Sources of long-run economic growth.
- The rationale for stabilization policy in Macroeconomic Policy.
- How productivity is driven by physical capital, human capital, and technological progress.
- How growth has varied among several important regions of the world and explain why the convergence hypothesis applies to economically advanced countries
- The challenges to growth posed by the scarcity of natural resources, environmental degradation, and efforts to make growth sustainable.
- How long-run economic growth is represented in macroeconomic models.

Students will be able to:

- Describe how the aggregate demand curve is used to illustrate the relationship between the aggregate price level and the quantity of aggregate output demanded in the economy.
- Describe how the aggregate supply curve is used to illustrate the relationship between the aggregate price level and the quantity of aggregate output supplied in the economy.
- Use the consumption function to show how current disposable income affects consumer spending.
- Explain how the wealth effect and the interest rate effect give the aggregate demand curve a negative slope.
- Identify the factors that can shift the aggregate demand curve.
- Explain how expected future income and aggregate wealth affect consumer spending.
- Identify the determinants of investment spending.
- Explain why investment spending is considered a leading indicator of the future state of the economy.
- Identify the factors that can shift the aggregate supply curve.
- Explain why the aggregate supply curve is different in the short run from in the long run.
- Describe the causes and effects of demand shocks and supply shocks.
- Determine if an economy is experiencing a recessionary gap or an inflationary gap and explain how to calculate the size of an output gap.
- Describe the importance of fiscal policy as a tool for managing economic fluctuations.

	• Identify the policies that constitute expansionary fiscal policy and those that constitute contractionary fiscal policy. • Explain why fiscal policy has a multiplier effect. • Describe how real GDP has changed over time. • Explain how real GDP varies across countries. • Identify the sources of long-run economic growth. • Explain how productivity is driven by physical capital, human capital, and technological progress. • Illustrate changes in productivity using an aggregate production function. • Discuss how growth has varied among several important regions of the world and explain why the convergence hypothesis applies to economically advanced countries. • Illustrate changes in productivity using an aggregate production function. • Discuss the factors that explain why long-run growth rates differ so much among countries. • Model the effects of economic growth policies.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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

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

AP Macroeconomics

Unit 4: *Money, Banking, and Monetary Policy (Krugman 22,23,24,25,26,27,28,29,30,31,34)*	**Duration:** 7 weeks
STAGE 1: Desired Results	

Established Goals:

National Content Standard(s) In Economics addressed:

11.1 The basic money supply in the United States consists of currency, coins, and checking account deposits.
11.2 In many economies, when banks make loans, the money supply increases; when loans are paid off, the money supply decreases.
11.3 The consumer price index (CPI) is the most commonly used measure of price-level changes. It can be used to compare the price level in one year with price levels in earlier or later periods.
12.2 Higher real interest rates increase the rewards for saving and make borrowing more expensive.
12.4 Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of a risky loan.
12.5 Higher real interest rates reduce business investment spending and consumer spending on housing, cars, and other major purchases.
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.
12.7 Expectations of increased inflation may lead to higher interest rates.
19.5 Changes in total employment are an important indicator of economic performance and influence levels of real GDP.
19.7 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.
20.7 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
20.8 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.
20.9 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 securities.
20.10 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.

Transfer

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

In this unit…
Students will solve real-world problems involving money, banking and monetary policy.

Meaning

Enduring Understandings
Students will understand that:
- Policies are implemented and institutions, such as the Federal Reserve, are created, to influence the stability of the economy.
- Economic systems have unique characteristics and vary in the level of control over market influences.
- Sound economic choices take into account the complex interaction of human and market behaviors.

Essential Questions
- What does the Federal Reserve Bank do?
- What are the tools the Government and the Federal Reserve has at their disposal to affect the economy.
- What role do banks and investing firms play in the economy?
- What happens to my money when I deposit it into a bank?
- What factors are considered in economic decision making?

Acquisition of Knowledge & Skills

Students will know:
- The relationship between savings and investment spending.
- How financial intermediaries help investors achieve diversification.
- The purposes of the four principal types of financial assets: stocks, bonds, loans, and bank deposits.
- The functions of money.
- The various roles money plays and the many forms it takes in the economy.
- The role of banks in the economy.
- The reasons for and types of banking regulation.
- How banks create money.
- The history, structure, and functions of the Federal Reserve System.
- How the Federal Reserve has responded to major financial crises.
- The primary tools the Federal Reserve uses to influence the economy.
- How the loanable funds market matches savers and investors.

Students will be able to:
- Describe the relationship between savings and investment spending.
- Show how financial intermediaries help investors achieve diversification.
- Describe the purposes of the four principal types of financial assets: stocks, bonds, loans, and bank deposits.
- Describe how the amount of money in the economy is measured.
- Explain why a dollar today is worth more than a dollar a year from now.
- Explain the concept of present value to make better decisions about costs and benefits that come in the future.
- Answer real world problems about the Federal Reserve. Including these topics:
  - The history, structure, and functions of the Federal Reserve System.
  - How the Federal Reserve has responded to major financial crises.
  - The primary tools the Federal Reserve uses to influence the economy.

● The determinants of supply and demand in the loanable funds market. ● How the two models of interest rates can be reconciled. ● Why governments calculate the cyclically adjusted budget balance. ● Problems posed by a large public debt. ● Why implicit liabilities of the government are also a cause for concern. ● How the Federal Reserve implements monetary policy, moving the interest rate to affect aggregate output. ● Why monetary policy is the main tool for stabilizing the economy. ● How the Phillips curve is used to show the nature of the short-run tradeoff between inflation and unemployment. ● Why there is no long-run trade-off between inflation and unemployment. ● Why expansionary policies are limited due to the effects of expected inflation ● Why even moderate levels of inflation can be hard to end. ● The problems with deflation that lead policymakers to prefer a low but positive inflation rate.	○ How the Federal Reserve implements monetary policy, moving the interest rate to affect aggregate output. ● Why monetary policy is the main tool for stabilizing the economy. ● Answer real world problems about the Financial Institutions. Including these topics: ○ The functions of money. ○ The various roles money plays and the many forms it takes in the economy. ○ The role of banks in the economy. ○ The reasons for and types of banking regulation. ○ How banks create money. ● Answer real world problems about the Loanable Funds Market. Including these topics: ○ How the loanable funds market matches savers and investors. ○ The determinants of supply and demand in the loanable funds market. ● Demonstrate how the Phillips curve is used to show the nature of the short-run tradeoff between inflation and unemployment. ● Show how the two models of interest rates can be reconciled. ● Why governments calculate the cyclically adjusted budget balance. ● Discuss the problems posed by a large public debt. ● Why implicit liabilities of the government are also a cause for concern. ● How the Federal Reserve implements monetary policy, moving the interest rate to affect aggregate output.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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

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

AP Macroeconomics

Unit 5: *International Trade and Foreign Exchange* *(Krugman 41,42,43,44,45)*	**Duration:** 3 weeks
STAGE 1: Desired Results	
Established Goals: **National Content Standard(s) In Economic addressed:** 7.5 An exchange rate is the price of one nation's currency in terms of another nation's currency. Like other prices, exchange rates are determined by the forces of supply and demand. Foreign exchange markets allocate international currencies. 17.2 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. 17.3 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.	
Transfer	
Transfer Goal: *Students will be able to independently use their learning to...* *Recognize and solve practical or theoretical problems involving economics, including those for which the solution approach is not obvious, by using economic reasoning and strategic thinking.* *In this unit…* *Students will solve real-world problems involving international trade and foreign exchange..*	
Meaning	
Enduring Understandings *Students will understand that:* ● Students will understand open-economy macroeconomics, the branch of macroeconomics that deals with the relationships between national economies. ● Markets are influenced by international, national and individual choice making.	**Essential Questions** ● Is Globalization a bad word? ● What are exchange rates and why do they matter when I travel abroad? ● What factors are considered in economic decision making? ● How are economic systems varied? ● How does the system of trade and exchange influence economic choices?
Acquisition of Knowledge & Skills	

Students will know:	**Students will be able to:**
• The meaning of the balance of payments accounts • How to Identify the determinants of international capital flows • How to explain the role of the foreign exchange market and the exchange rate • The importance of real exchange rates and their role in the current account • The difference between fixed exchange rates and floating exchange rates	• Explain the meaning of the balance of payments accounts • Identify the determinants of international capital flows • Explain the role of the foreign exchange market and the exchange rate • Explain the importance of real exchange rates and their role in the current account • Discuss the considerations that lead countries to choose different exchange rate regimes. • Describe the effects of currency devaluation and revaluation under a fixed exchange rate regime. • Explain how macroeconomic policy affects exchange rates under a floating exchange rate regime. • Explain the pros and cons of protectionism. • Illustrate the effects of a tariff and an import quota. • Use macroeconomic models to conduct policy analysis.

STAGE 2: ACCEPTABLE EVIDENCE

Performance Task & Unit Assessments:

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

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

AP Macroeconomics

Unit 6: *Enrichment Modules - After the AP Exam* *Financial Markets and Crises,* and *Behavioral Economics*	**Duration:** 3 weeks

STAGE 1: Desired Results

Established Goals:

National Content Standard(s) In Economics addressed:

1.2 Economic wants are desires that can be satisfied by consuming a good (an object), a service (an action), or a leisure activity.
2.2 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.
2.4 Costs that have already been incurred and benefits that have already been received are sunk and irrelevant for decisions about the future.
2.6 Some decisions involve taking risks in that either the benefits or the costs could be uncertain. Risk taking carries a cost. When risk is present, the costs should be treated as higher than when risk is not present.
4.2 Decision-making in small and large firms, labor unions, educational institutions, and not-for-profit organizations has different goals and faces different rules and constraints. These goals, rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior
4.3 People tend to respond to fair treatment with fair treatment, and to unfair treatment with retaliation, even when such reactions may not maximize their material wealth.
14.3 Productivity and efficiency gains that result from innovative practices of entrepreneurs foster long term economic growth.
15.5 The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).
17.1 A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected benefits.
17.2 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.
20.1 Fiscal policies are decisions to 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.

Transfer

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

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

<table>
<tr><th colspan="2">Meaning</th></tr>
<tr><td>Enduring Understandings
Students will understand that:
There are key indicators of a well-functioning financial system.
Markets Fail.
When markets fail, there are consequences.
Not all purchasing decisions are rational, but economists use some basic assumptions when studying behavioral economics.</td><td>Essential Questions
What is the role of government?
How can economics influence your choice of a spouse?</td></tr>
<tr><th colspan="2">Acquisition of Knowledge & Skills</th></tr>
<tr><td>Students will know:
Why an efficient financial system is important.
What a shadow bank is.
How an asset bubble can lead to an economy wide banking crisis.
Possible consequences of a financial crisis.
The definition of moral hazard.
Behaviors that might be considered irrational and how emotions play into these behaviors.
Definition and usage of sunk costs.
That gullibility can lead to poor decision making.
What altruism is and how economists look at it.
People may or may not purchase products based on the environmental influence of the production of the product.
Define of the Neoclassical Model.</td><td>Students will be able to:
Draw a circular-flow diagram that includes households, firms, factor markets, markets for goods and services, and financial market.
List and describe the four major causes of the 2008 financial crisis.
Describe the four main elements of the Dodd-Frank Act.
Debate the role of moral hazard in the 2008 financial crisis.
Identify types of behavior in purchasing decisions.
Use the Ultimatum game to reveal about participants?
Define and explain the Neoclassical Model</td></tr>
<tr><th colspan="2">STAGE 2: ACCEPTABLE EVIDENCE</th></tr>
<tr><td colspan="2">Performance Task & Unit Assessments:
Students will work in groups to prepare a research paper and presentation based on a list of available topics.</td></tr>
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