PLANNED INSTRUCTION

A PLANNED COURSE FOR:

AP Economi	cs: Micro	Microeconomic and Macroeconomic			

Grade Level: 11th & 12th

Date of Board Approval: _____2018_____

Planned Instruction

Title of Planned Instruction: AP Economics: Microeconomic & Macroeconomic

Subject Area: Social Studies Grade(s): 11th & 12th

Course Description:

AP Microeconomics

The focus of the microeconomic section of this course is to give students a thorough understanding of the principles of economics that apply to the function of individual decision makers, both consumer and producers, within the economic system. It places primary emphasis on the nature and function of the product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

AP Macroeconomics

The purpose of the macroeconomic section is to give students an understanding of the economic system as a whole. This section places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

Time/Credit for the Course: 1 full year course/ 1 credit

Curriculum Writing Committee: Michael T. Murray

Curriculum Map

Marking Period One:

Overview based on 45 days:

Student will be introduced to basic economic concepts that effect the economic systems of all economies. Students will describe and illustrate both supply and demand in a perfectly competitive market, and imperfect competition.

Unit 1-15 days (pre-requisite summer work as a foundation not included in number of days) Unit 2-30 days

Goals:

Understanding of:

Unit 1 - Basic Economic Concepts

- The Economic Way of Thinking
- Scarcity, Choice, and Opportunity Cost
- Production Possibilities Curve
- Comparative Advantage, Absolute Advantage, Specialization and Trade
- Explicit and Implicit Cost
- Circular Flow Chart
- Economic Systems
- Marginal Analysis

Unit 1 - Demand

- Analysis the relationship between price and quantity demanded.
- Connect and understand the consumer choice behind the demand curve.
- Connect and understand the Income and substitution approach.
- Analyze the Law of diminishing marginal utility.
- Assess elasticity of demand.
- Analyze consumer surplus.
- Connect and understand the Determinants of demand.
- Analyze the changes in quantity of demand.

Unit 1 - Supply

- Analysis the relationship between supply and quantity supplied.
- Connect and understand the elasticity of supply.
- Analyze producer surplus.
- Connect and understand the determinants of supply.
- Compare the changes in quantity supplied vs. changes in supply.

Unit 2 - Equilibrium

- Synthesize why and how price and quantity moves toward equilibrium.
- Analyze effects of shifts in supply and demand on equilibrium price and quantity.
- Connect and understand the markets as a provider of information, creators of incentives and allocators of resources.

• Connect and understand the basic manipulation of the supply and demand model.

Unit 2 - Elasticity of Demand and Supply

- Analyze price elasticity of demand.
- Understand and calculated total revenue.
- Apply the concept of the Arc Method of calculation.
- Analyze the tax incidence and price elasticity of demand.
- Connect and understand income and cross-elasticity of demand.

Unit 2 - Price Floor and Ceiling

- Analyze the effect in terms of supply and shortages.
- Understand why shortages and surpluses are created.
- Analyze market behavior using supply and demand.

Unit 2 - Production

- Connect and differentiate among different businesses.
- Connect the concept of firm.
- Connect, explain, and calculate total product, marginal product, and average product and describe the relationship among these concepts.
- Connect and interpret production functions.
- Connect and differentiate between short run and long run and between fixed and variable inputs.
- Connect the law of diminishing returns and explain how it is depicted by the total product and marginal product curves.
- Explain the relationship between production and cost.

Unit 2 - Short-run and Long-run Cost

- Connect and differentiate between explicit and implicit costs.
- Connect, calculate, and interpret data (graphs).
- Apply concepts and distinguish between short-run and long-run cost curves.
- Calculate and define fixed, variables, averages, marginal, and total costs and explain how they vary with the level of output in the short run and long run.
- Connect and explain economics and diseconomies of scale and constant returns to scale.
- Connect and calculate the least-cost combination of inputs to employ for existing firm.

Unit 2 - Profit Maximization

- Connect the concept of maximization of profit.
- Apply concepts and apply the rule MC=MR
- Understand the concept of minimization of losses
- Calculate and graph data concerning the level of production by using profit-maximizing rules.
- Connect and shutdown criterion.
- Apply concepts the break-even point and apply break-even analysis
- Apply the concepts of marginal cost and marginal revenue to determine maximization of profits.

Unit 2 - Pure Competition

• Connect pure competition and explain the conditions under which it functions.

- Construct total revenue/total cost and marginal revenue/ marginal cost analyses to determine output of a competitive firm.
- Connect and distinguish between short-run and long-run equilibrium.
- Understand the concept of minimization of losses
- Identify and determine the short-run supply curve for a competitor.
- Connect and shutdown criterion.
- Construct and describe the long-run market supply curve in the case of a purely competitive market for a constant cost and an increasing cost market.

Unit 2 - The Pure Monopoly

- Connect monopoly and explain the conditions under which it functions.
- Identify and graphically construct the demand, average revenue, and marginal revenue curves for a pure monopolist.
- Analyze a marginal revenue/marginal cost analysis to determine output and price for a firm and illustrate and explain the conditions of economic profit, normal profit, or loss.
- Analyze and explain the welfare loss associated with pure monopolies.
- Connect, explain, and illustrate conditions for price discrimination.
- Evaluate price discrimination, including harmful and beneficial effects.
- Compare and contrast operations of a monopoly with that of a pure competitor.

Unit 2 - Monopolistic Competition and Oligopoly

- Analyze and describe the forms of imperfect competition.
- Analyze the characteristics of oligopoly
- Determine and explain the short-run output and price for the imperfect competitor.
- Connect the concept of production differentiation
- Connect the different concepts of demand with respect to the oligopoly.

Unit 2 - Regulation of Markets

- Connect and explain a natural monopoly.
- Illustrate and explain market inefficiencies related to monopolies
- Connect and explain the different types of pricing in order to regulate monopolies.
- List and explain economic criticisms of regulatory commissions.
- Connect and explain the nature of antitrust activities.
- Analyze the reasons for government regulations.

Marking Period Two:

Overview based on 45 days:

Students will apply economic concepts to the Factor/Resource market and the connection between the factors of production and output.

Unit 3 - 20 days

Unit 4 - 25 days

Goals:

Understanding of:

Unit 3 - Factor/Resource Demand

- Connect resources that are used in the production process.
- Analyze the concept of derived demand.
- Calculate and explain the quantity of labor or a resource to be hired/bought by a firm.
- Create a short-run demand schedule for a resource.
- Calculate and determine the relative amounts or proportions a producer should hire of two or more resources.
- Analyze the relationship between MRP and the demand for an input.
- Analyze and apply the rule for finding least-cost combination.

Unit 3- The Supply of Labor and Wage Determination

- Connect how the marginal productivity theory of resources demand applies to wage rate determination.
- Analyze how the wage rate is determined.
- Calculate and determine wage rates in a competitive labor market and in a monopolistic labor market.
- Connect the determinants of income distribution.
- Analyze the concept of bilateral monopoly.

Unit 3 - Labor Unions, Strategies, and Impact on Wages and Employment

- Analyze the purpose of labor unions and their organization.
- Connect the effects of unions and specific union tactics on wages and employment in both competitive and monopolistic markets.
- Explain the concept of bilateral monopoly and its effects on employment.
- Evaluate the efficiency of specific legislation aimed at increasing wage rates and employment.

Unit 3 - Rent, Interest, and Profits

- Synthesize between pure economic rent and quasi-rent.
- Analyze between the nominal and real interest rate.
- Given the real interest rate and the anticipated rate of inflation, calculate the nominal interest rate.
- Connect the effects of local on the amount of rent charged.
- Analyze the profit margin available in rental income.

Unit 4 - Government & Market Failure

- Analyze public goods.
- Analyze the characteristics of a public good.
- Design a rationale for determining which goods should be produced by a public sector.
- Design criteria for evaluating the effectiveness of government programs.
- Connect and give examples of externalities or third-party costs and benefits.
- Analyze how positive market activities can cause externalities.

Unit 4 - Public Choice Theory and Taxation

- Connect and differentiate among progressive, regressive, and proportional taxes.
- Define and differentiate between the ability-to-pay and the benefits-received theories of taxation.

- Analyze tax incidence.
- Analyze and show graphically how tax incidence is shifted.
- Design criteria for evaluating the fairness of a tax.

Unit 4- Antitrust Policy & Regulations

- Analyze the antitrust policy of the United States, including but not limited to the Sherman Antitrust Act, Clayton Antitrust Act, Federal Trade Commission Act of 1914.
- Interpret the impact of Antitrust Policy of production and consumption.
- Connect the effect of antitrust policy on wage and labor.

Marking Period Three:

Overview based on 45 days:

Student will revisit the circular flow chart and analyze and synthesize the application to macroeconomics.

Unit 5 – 20 days Unit 6 – 25 days

Goals:

Understanding of:

Unit 5 - Macroeconomics and the Circular Flow

- Explain the important macroeconomic issues.
- Describe the circular flow of goods, services and payments in the macro economy.
- Identify major sectors of the macroeconomy.
- Evaluate macroeconomic goals and GDP.
- Describe the economic goals of U.S. society
- Define full employment, inflation and economic growth.
- Explain the methods of measuring macroeconomic goals.
- Describe the construction of a price index.
- Demonstrate why income equals expenditure equals output.
- Explain formulas and application.
- Define consumption, investment, government purchases, and net exports.
- Calculate real and nominal GDP using base year and current year prices.

Unit 5 - Price Indexes and Inflation

- Demonstrate how to change the base year of a price index.
- List the five steps necessary to calculate the inflation rate
- Discuss three reasons why the CPI maybe biased
- Describe two differences between the CPI and GDP deflator.
- Convert a value measured in base year dollars to measurement in currency year dollars.
- Explain the relationship between the real interest rate, the nominal interest rate, and actual inflation rate.

Unit 5 - Saving, Investment, and the Financial System

- Define Financial Institutions in the U.S. Economy.
- Discuss Saving and Investment in the National Income Accounts
- Explain formulas and application: S=(Y-T-C) + (T-G)
- Explain Market for Loanable Funds and diagrams
- Compare saving and investment incentives graphically analyze the effect of government budget deficits and surpluses.

Unit 5 - Unemployment

- Analyze the data used to measure the rate of unemployment.
- Investigate how unemployment arises from the process of job search and the business cycle.
- Analyze the impact of minimum wage of the job market.
- Draw a conclusion between the bargaining between firms and unions.
- Critique the theory of efficiency wages
- Draw conclusions of wages and employment through formulas and graphics.

Unit 6 - Keynesian Model

- Create the Keynesian model.
- Analyze the four sectors of the Keynesian model.
- Explain equilibrium in the Keynesian model.
- Contrast differences in Keynesian and Classical economic theory.
- Explain the economy's response if income is not at equilibrium.
- Compare the difference between equilibrium output and full-employment output.
- Explain the consumption function.
- Cite evidence that the relationship between average and marginal propensities to consume and save is realized to macroeconomic theory.
- Prove the multiplier process.

Unit 6 - Investment Demand

- Define investment.
- Differentiate between investment in capital stock and financial investment.
- Describe the determinants of investment.
- Explain why changes in the interest rate change the level of investment.
- Describe the effects of different interest elasticity's of investment demand.

Unit 6 - Aggregate Demand

- Define aggregate demand
- Explain why the aggregate demand curve is downward sloping.
- Describe the factors that affect aggregate demand
- Explain what factors will shift the aggregate demand curve.

Unit 6 - Aggregate Supply

- Define aggregate supply
- Explain why the aggregate supply curve is upward sloping.
- Describe the factors that affect aggregate supply
- Explain what factors will shift the aggregate supply curve.

Unit 6 - Short-Run Equilibrium

- Explain the macroeconomic equilibrium.
- Explain what happens to the equilibrium price level and quantity with a change in aggregate demand.
- Explain what happens to the equilibrium price level and quantity with a change in aggregate supply.
- Explain the relationship between the simple Keynesian model and the AD and AS model.
- Distinguish among equilibrium below, above, and at full employment.

Unit 6 - Aggregate Supply and Aggregate Demand Analysis

- Explain the shifts in aggregate demand.
- Explain the shifts in aggregate supply.
- Explain the price and output effect of shifts in aggregate demand and aggregate supply.
- Explain the effects on price and output as the economy moves from the short run to the long run.
- Explain the effects on nominal wage, real wage and employment of the movement from the short run to the long run.

Unit 6 - The Long-Run Economy

- Review the process of moving from short run to the long run.
- Review the factors that shift the long-run aggregate supply curve.
- Relate the long-run aggregate supply curve to the production possibilities curve.

Unit 6 - Fiscal Policy

- Explain the impact of government spending changes on the economy.
- Explain the effect of changes in taxes on the economy.
- Describe the embedded fiscal policy tools and explain how the tools adjust the economy.
- Explore the alternative methods of analyzing fiscal policy effects.

Marking Period Four:

Overview based on 45 days:

Students will analyze and connect the functions of the Federal Reserve and its use of monetary policy to control the interest rate. Students will research, create, and defend a presentation of an economic topic.

Unit 7 – 20 days Unit 8 – 25 days

Goals:

Understanding of:

Unit 7- Money

- Describe the properties of money.
- Describe the function of money.
- Explain the definitions of money used in the United States.
- Explain the concept of near-monies.

Unit 7 - Equation of Exchange

- Define the equation of exchange.
- Define the variables in the equation of exchange.
- Explain how changes in the money supply are translated into changes in nominal GDP, prices, and output.

Unit 7 - Financial Intermediaries

- Explain the economic function of financial intermediaries.
- Explain the fractional reserve system.
- Explain the process by which banks create or destroy money and the factors that affect the increase or decrease in the money supply.
- Define the required reserve ratio, required reserve, excess reserves and deposit expansion multiplier.

Unit 7 - The Monetary System

- Describe the structure of the Federal Reserve System.
- Explain the role of the Fed in money creation.
- Explain the money multiplier in a fractional reserve banking system
- List and explain the three tools the Fed uses to change the money supply.

Unit 7 - Money Growth and Inflation

- Demonstrate the link between money and prices with the quantity equation.
- Explain why money has no impact on real variables in the long run.
- Explain the concept of an inflation tax.
- Show the relationship between the nominal interest rate, the real interest rate, and the inflation rate.
- Explain who gains and who loses on a loan contract when inflation rises unexpectedly.

Unit 7 - Policy Lags and Crowding-Out Effect

- Explain situational and established lags from monetary and fiscal policy.
- Define the crowding-out effect.
- Explain the effect of crowding-out within the short-run aggregate demand and aggregate supply demand.
- Demonstrate the use of monetary policy to lessen or reinforce the crowding-out effect.

Unit 8 - Monetary and Fiscal Policy Interact

- Practice analytical skills with AD and SRAS model and the money market.
- Analyze the effects of combined monetary and fiscal policies on the loanable funds market.

Unit 8 - Phillip curve and Stabilization Policy

- Define the Phillips curve.
- Demonstrate the short-run trade-off between unemployment and inflation.
- Show how monetary and fiscal policy can help the economy move along the short-run Phillips curve.
- Show how the short-run Phillips curve develops into a vertical long-run Phillips curve.

Unit 8 - Economic Growth

- Describe long-term economic growth trends in the United States.
- Explain growth accounting.
- Explain that growth accounting shows that to achieve increased economic growth, economies must increase the growth rate of per capital stock or increase technological development.
- Explain how policy can help achieve increases in the growth rate of per capital stock or increase technological development.
- Relate economic growth to the long-run aggregate supply curve and production possibilities curve.

Unit 8 - Macroeconomic Theories

- Explain the different types of lags in making policy and the reasoning for various lengths in the lags.
- Describe the concept of crowding-out and the extent crowding-out can change depending on the responses of interest rates, consumption spending, and business investment.
- Explain the reasons why prices and wages do not adjust instantaneously.
- Provide examples of conflicts among attaining divergent economic goals.

Curriculum Plan

<u>Unit: 1</u> <u>Time Range:</u> 15 Days

Standard(s): PA Academic Standards: 6.1.12.A, 6.1.12.B, 6.1.12.C & 6.1.12.D. CC.6.1.7.C, CC.6.1.8.C, CC.6.1.9.C, CC.6.1.12.A, CC.6.1.C.A., CC.6.1.U.A., CC.6.1.W.A.

Big Idea(s): UNIT 1: Introduction to Economics and the Product Market Big Idea: Limited resources and unlimited wants require choice by individuals, groups, and nations.

Essential Questions:

 How do contemporary nations deal with issue of economic scarcity and the distribution of goods and services within their respective societies?

Concepts:

• Scarcity, a fundamental law of economics, exists when individuals, entities, nation-states have wants that are more than the limited supply. Most wants (goods) are limited and as a result are rationed through price or other means.

Competencies:

• Ascertain what is gained and what is given up when a choice is made. Analyze actions taken as a result of scarcity issues in local, regional, and international economies.

Overview:

Promotes understanding of economic decision making and its factors, such as marginal analysis and opportunity costs.

Goals:

- Students will be able to analyze the relationship of decision making, trade-off and opportunity cost as it relates to scarcity of resources.
- Students will be able to distinguish between supply and demand.
- Students will be able to identify the determinants of supply and demand.
- Students will be able to compare the relationship between changes in supply and demand
- Students will be able to calculate levels of consumer and supplier surplus.

- Students will be able to connect scarcity, choice, and opportunity cost. (DOK- Level Four)
- Students will be able analyze the production possibilities curve. (DOK- Level Four)
- Students will be able connect and analyze comparative advantage, absolute advantage, specialization and trade. (DOK- Level Four)
- Students will be able connect explicit and implicit costs. (DOK- Level Four)
- Students will be able analyze the interdependence and relationship of the circular flow chart. (DOK-Level Four)
- Students will be able connect and analyze the function of economic systems. (DOK- Level Four)

- Students will be able connect and analyze property rights and the role of incentives. (DOK- Level Four)
- Students will be able connect and analyze marginal analysis. (DOK- Level Four)

Students will be able to:

- Analyze the types of economic systems by hands on trade project.
- Connect the broad social goals of a society.
- Analyze way the scarcity problem forces people to consider opportunity cost.
- Analyze scarcity, opportunity cost, and production possibilities curves.
- Synthesize the reason for changes in demand.
- Connect the change in demand from a change in the quantity of demand.
- Investigate the reason for changes in supply.
- Connect a change in supply from a change in the quantity of supply.
- Critique excise taxes.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

- Review packets and terminology
- Multiple Choice questions for quizzes and tests
- Free Response questions quizzes & tests

Extensions:

- Questions in Preparation for AP Economics Examination Third Edition
- The Princeton Review: Cracking AP Economics
- Strive for a 5: Preparing for the Microeconomics AP* Examination.

- http://reffonomics.com/reff/index.html online for review and more practice questions
- http://w.w.w.whitenova.com/thinkEconomics/ online for review and more practice questions
- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas

Unit: 2 Time Range: 30 Days

Standard(s): PA Academic Standards: 6.1.12.A, 6.1.12.B, 6.1.12.C & 6.1.12.D. CC.6.1.7.C, CC.6.1.8.C, CC.6.1.9.C, CC.6.1.12.A, CC.6.1.C.A., CC.6.1.U.A., CC.6.1.W.A.

Big Idea(s):

 Analyze the theory of Perfect Competition and its relationship to Imperfect Competition and relevant to economic systems.

Essential Questions:

• Why is determining the unintended consequences through an analysis of marginal costs/benefit and opportunity cost of a particular economic choice or national policy important?

Concepts:

- Economic decisions making requires comparing the additional costs of alternatives including benefits and liabilities.
- Choice or effective decisions are required to benefit individuals and societies as consumers, producers, savers, investors, and citizens.

Competencies:

- Ascertain what is gained and what is given up when a choice is made.
- Apply the concepts or marginal benefit and marginal cost to a public policy.

Overview:

Promotes understanding of the nature and function of the product market: Supply and Demand.

Goals:

- Students will be able to graph and analyze using formulas the relationship of the Laws of Supply and Demand in both a regulated and unregulated market.
- Students will be able to graph changes and shifts of the supply and demand curves.
- Students will be able to locate market equilibrium and government policies which may affect equilibrium.
- Students will be able to see the effects of elasticity on consumer and producer choices in the marketplace.

- Students will analyze why there is a direct relationship between price and quantity supplied, other thing being constant. (DOK- Level Four)
- Students will connect what a change in supply is from a change in quantity supplied with a given supply graph. (DOK- Level Four)
- Students will analyze the allocation of resources. (DOK- Level Four)
- Students will analyze why the market-clearing (equilibrium) price be set at the intersection of supply and demand, and not at a higher or lower price. (DOK- Level Four)
- Student will analyze what is price elasticity of demand. (DOK- Level Four)

- Students will connect elasticity of demand and change in total revenue. (DOK- Level Four)
- Students will apply concepts of elasticity to the real world. (DOK-Level Four)
- Students will analyze price elasticity of demand and why is the concept important to producers.
 (DOK- Level Four)
- Students will analyze how a consumer maximizes her/his total utility. (DOK-Level Four)
- Students will analyze how the law of diminishing utility accounts for the law of demand. (DOK- Level Four)

Students will be able to:

- Analyze the relationship between price and quantity demanded.
- Connect the consumer choice behind the demand curve.
- Critique the Law of diminishing marginal utility.
- Analysis the relationship between supply and quantity supplied.
- Assess the impact of elasticity of supply.
- Analysis producer's surplus.
- Draw a conclusion of how price and quantity moves toward equilibrium.
- Analyze effects of shifts in supply and demand on equilibrium price and quantity.
- Connect income and cross-elasticity of demand.
- Analyze the effect in terms of supply and shortages.
- Analyze market behavior using supply and demand.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
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Formative:

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- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

<u>Unit:</u> 3 <u>Time Range:</u> 20 Days

Standard(s): Addressed: CC.5.3.C.G, CC.6.4.3.A, CC.6.4.4.A, CC.6.4.5.A, CC.6.4.6.A, CC.6.4.7.A, CC.6.4.8.A, CC.6.4.C.A, CC.6.4.U.A, CC. 6.4.W.A, CC.6.4.6.D, CC.6.4.7.D, CC.6.4.8.D, CC.6.4.W.A.

PA Academic Standards: 6.1.12.D, 6.2.12.A, 6.2.12.B, 6.2.12.D, & 6.2.12.G.

Big Idea(s):

• How the scarcity of resources, transportation, communication networks, and technological innovation affect international economic patterns and distribution of wealth.

Essential Questions:

 What comparative advantages have enabled the United States to achieve its current status as the premier global economic power?

Concepts:

• The location of resources, transportation, communication networks, and technology and how changes in these have affected international economic patterns.

Competencies:

Evaluate why one country can produce a good at a lower cost than another country.

Overview:

Promotes understanding of the factor/resource markets including capital and labor markets.

Goals:

- Students will be able to analyze the function of the factor/resources market as it relates to input and output and the impact of the functions of production.
- Students will measure how costs both fixed and variable are computed and how those costs affect firms' decisions.
- Students will be able to identify what separates the short-run and long-run.

- Students will analyze different types of market structure. (DOK-Level Four)
- Students will connect why marginal product first rises and then declines as more variable inputs are added to the production process. (DOK-Level Four)
- Students will analyze the different forms of business structure and what differentiates them from one another. (DOK-Level Four)
- Students will critique what distinguishes the short run form the long run. (DOK-Level Three)
- Student will connect why marginal product first rises and then declines as more variable inputs are added to the production process. . (DOK-Level Four)
- Students will assess how the law of diminishing returns accounts for an increasing marginal cost curve for a firm in the short run. (DOK-Level Three)
- Students will compare how marginal cost (MC) relates to: average total cost (ATC), average variable cost (AVC), and average fixed cost (AFC). (DOK-Level Three)

- Students will analyze price elasticity of demand and why is the concept important to producers. (DOK- Level Four)
- Students will analyze why the MC<AVC< and ATC curves are U-shaped. (DOK-Level Four)

Students will be able to:

- Analyze and differentiate among different businesses.
- Connect the concept of firm.
- Critique and calculate total product, marginal product, and average product and describe the relationship among these concepts.
- Analyze and interpret production functions.
- Connect and differentiate between short run and long run cost curves and between fixed and variable inputs.
- Assess the law of diminishing returns and explain how it is depicted by the total product and marginal product curves.
- Construct the relationship between production and cost.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
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Formative:

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- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

<u>Unit:</u> 4 <u>Time Range:</u> 25 Days

Standard(s)Addressed: CC.6.3.7.B, CC.6.3.8.B, CC.6.3.9.B. CC.6.3.12.A, CC.6.3.C.A, CC.6.3.7.B, CC.6.3.7.D, CC.6.3.8.B, CC.6.3.8.D, CC.6.3.9.B, CC.6.3.12.D, CC.6.3.12.D, CC.6.3.C.C, CC.6.3.C.D, CC. 6.3.C.D, CC.6.3.U.C.

PA Academic Standards: 6.3.12.A, 6.3.12.B, 6.3.12.C, & 6.3.12.D.

Big Idea(s):

• The relationship between public and private goods and how government intervenes in these areas to reach a government-established, socially acceptable level of cost vs. benefit.

Essential Questions:

- How does the government determine a socially acceptable level of a good?
- What methods does the government use to enforce funding or discouraging the activity?

Concepts:

• The federal government policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

Competencies:

 Analyze the impact of fiscal policies and decisions to change spending and tax levels by the federal government.

Overview:

Promote the understanding of the role of government in correcting market failure and providing regulations.

Goals:

- Students will be able to understand market failure.
- Students will be able to differentiate between private and public benefits and costs.
- Students will be able to depict how private market activities can develop externalities.
- Students will be able to employ cost-analysis to determine acceptable levels of an externality.
- Students will be able to theorize reasons for federal regulations in response to social externalities.

- Students will analyze how private market activities can cause externalities. (DOK Level Four)
- Students will formulate examples of third-party costs or negative externalities. (DOK-Level Four)
- Students will assess third-party benefits or positive externalities. (DOK-Level Three)
- Student will analyze ways positive and negative externalities can cause overproduction or underproduction of goods and services. (DOK-Level Four)
- Students will critique the Coase Theorem and use it to analyze how negotiations among privateproperty owners can resolve market allocation problems. (DOK-Level Three)
- Students will analyze how marginal analysis can determine the optimum amount of pollution cleanup. (DOK-Level four)

- Students will compare the information-cost problem, and analyze the effectiveness of the government policies employed to correct it. (DOK-Level Three)
- Students will connect the function of the Federal Reserve System to the economy. (DOK-Level Four)

Students will be able to:

- Describe the characteristics of a public good.
- Develop a rationale for determining which goods should be produced by a public sector.
- Develop criteria for evaluating the effectiveness of government programs.
- Define and give examples of externalities or third-party costs and benefits.
- Explain how positive market activities can cause externalities.
- Explain and show graphically how tax incidence is shifted.
- Develop criteria for evaluating the fairness of a tax.
- List and explain the antitrust policy of the United States, including but not limited to the Sherman Antitrust Act, Clayton Antitrust Act, Federal Trade Commission Act of 1914.
- Interpret the impact of antitrust policy on production and consumption.
- Explain the effect of antitrust policy on wage and labor.
- Define and differentiate among progressive, regressive, and proportional taxes.
- Define and differentiate between the ability-to-pay and the benefits-received theories of taxation.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

- Review packets and terminology
- Multiple Choice questions for guizzes and tests
- Free Response questions quizzes & tests

Extensions:

- Questions in Preparation for AP Economics Examination Third Edition
- The Princeton Review: Cracking AP Economics
- Strive for a 5: Preparing for the Microeconomics AP* Examination.

- http://reffonomics.com/reff/index.html online for review and more practice questions
- http://w.w.w.whitenova.com/thinkEconomics/ online for review and more practice questions
- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

Unit: 5 Time Range: 20 Days

Standard(s): Addressed: CC.6.4.4.B, CC.6.4.4.C, CC.6.4.5.B, CC.6.4.5.C, CC.6.4.6.B, CC.6.4.6.C, CC.6.4.7.B, CC.6.4.7.C, CC. 6.4.9.B, CC. 6.4.8.C, CC.6.4.12.B, CC. 6.4.12.C, CC.6.4.C.C, CC.6.4.W.B, CC. 6.4.5C, CC.6.4.9.B, CC.6.4.12D, CC.6.4.W.D.

PA Academic Standards: 6.5.12.A, 6.5.12.C, 6.5.112.E, 6.5.12.G.

Big Idea(s):

• The presence of private and public goods in society and how their benefits and costs are measured. Government reaction to social benefits and costs.

Essential Questions:

- What are private and public goods?
- What differentiates between public and private goods?
- How do economists measure benefits and costs of private and public goods?
- What is the effect of taxation on the market?
- What governmental regulations effect the economy and why?

Concepts:

• A nation's various economic goals of are sometimes in conflict with one another and methods must be used to balance these goals.

Competencies:

• Determine the cost of balancing socially optimal and private benefits.

Overview:

The role of economic growth and goals of a society and how governments attempt to accomplish both.

Goals:

- Students will be able to differentiate between economic goals.
- Students will be able to measure economic growth.
- Students will be able to connect how employment influences economic growth.
- Students will be able to show how inflation affects prices and what it means to an economy.

- Students will compare the economic goals of U.S. (DOK- Level Three)
- Students will analyze full employment, inflation and economic growth. (DOK- Level Three, DOK-Level Four)
- Students will assess the methods of measuring macroeconomic goals. (DOK- Level Four)
- Student will critique the construction of the price index. (DOK- Level Three)
- Students will connect the difference between real GDP and nominal GDP. (DOK Level Four)
- Students will analyze the important of GDP as measure of economic activity. (DOK Level Four)
- Students will connect how to change the base year of the price index. (DOK- Level Four)
- Students will explain the impact of unanticipated inflation. (DOK- Level Three)

- Students will calculate unemployment, employment, labor force and labor force participation rate. (DOK Level Three)
- Students will analyze the issues in measuring unemployment. (DOK- Level Four)
- Students will critique the types of unemployment. (DOK- Level Three)

Students will be able to:

- Compare macroeconomics to microeconomics.
- Analyze the important macroeconomic issues.
- Connect the circular flow of goods, services and payments in the macro economy.
- Critique the major sectors of the macro economy.
- Analyze the economic goals of U.S. society.
- Connect full employment, inflation, and economic growth.
- Compare the methods of measuring macroeconomic goals.
- Describe the construction of a price index.
- Demonstrate why income equals expenditure equals output.
- Define consumption, investment, government purchases, and net exports.
- Calculate real and nominal GDP using base year and current year prices.
- Demonstrate how to change the base year of a price index.
- List the five steps necessary to calculate the inflation rate
- Describe two differences between the CPI and GDP deflator.
- Explain the relationship between the real interest rate, the nominal interest rate, and the inflation rate.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

- Review packets and terminology
- Multiple Choice questions for quizzes and tests
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- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

<u>Unit:</u> 6 <u>Time Range:</u> 25 Days

Standard(s) Addressed: CC.6.5.4.B, CC.6.5.5.B, CC.6.5.6.B, CC.6.5.7.B, CC.6.5.8.B, CC.6.5.9.B,

CC.6.5.12.A, CC.6.5.12.B, CC.6.5.7.A, CC.6.5.8.A, CC.6.5.9.A, CC.6.5.12.A. **PA Academic Standards**: 6.2.12.B, 6.2.12.E, 6.3.12.A, 6.4.12.B, 6.5.12.E.

Big Idea(s):

Promote understanding of aggregate supply and demand in the marketplace.

Essential Questions:

- What is Keynesian economics?
- What is aggregate demand?
- What is aggregate supply?

Concepts:

• The accumulation of resources, whether abundant or not, is wealth. Individuals, regional entities, and nation states produce wealth to satisfy human needs and wants.

Competencies:

• Assess factors that impact an individual and entities' standard of living and changes in the long-run.

Overview:

Promote understanding of aggregate supply and demand in the marketplace.

Goals:

- Students will be able to compare and contrast Keynesian vs. classical economics.
- Students will be able to distinguish among different economic theories.
- Students will be able to identify what factors affect aggregate supply and aggregate demand.
- Students will be able to calculate changes in short-run and long-run.

- Students will connect the four sectors of the Keynesian model. (DOK- Level Four)
- Students will analyze aggregate demand. (DOK- Level Four)
- Students will compare why aggregate demand curve is downward sloping. (DOK Level Three)
- Students will analyze the factors that affect aggregate demand. (DOK- Level Four)
- Student will analyze what factors that affect aggregate demand. (DOK- Level Four)
- Students will connect aggregate supply. (DOK- Level Four)
- Students will compare why the aggregate supply curve is upward sloping. (DOK Level Three)
- Students will analyze the factors that affect aggregate supply. (DOK- Level Four)
- Students will assess what factors will shift the aggregate supply curve. (DOK- Level Three).
- Students will compare what shifts the aggregate demand and supply. (DOK- Level Four)
- Students will assess the price and output as the economy moves from short run to long run. (DOK-Level Three, DOK- Level Four)

- Students will analyze the effects on nominal wage, real wage and employment of the movement from the short run to the long run. (DOK- Level Four)
- Students will connect the process of moving from the short run to the long run. (DOK- Level Four)
- Students will critique the factors that shift the long-run aggregate supply curve. (DOK- Level Three)
- Students will analyze the long-run aggregate supply curve to the production possibilities curve.
 (DOK- Level Four)

Students will be able to:

- Analyze the four sectors of the Keynesian model.
- Analyze equilibrium in the Keynesian model.
- Analyze the economy's response if income is not at the equilibrium.
- Differentiate between investment in capital stock and financial investment.
- Describe the determinants of investment.
- Analyze why changes in the interest rate change the level of investment.
- Analyze why the aggregate demand curve is downward sloping.
- Describe the factors that affect aggregate demand.
- Analyze what factors will shift the aggregate demand curve.
- Analyze why the aggregate supply curve is upward sloping.
- Describe the factors that affect aggregate supply.
- Analyze what factors will shift the aggregate supply curve.
- Analyze the shifts in aggregate demand.
- Analyze the shifts in aggregate supply.
- Analyze the price and output effect of shifts in aggregate demand and aggregate supply.
- Analyze the effects on price and output as the economy moves from the short -run to the long- run.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

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- http://w.w.whitenova.com/thinkEconomics/ online for review and more practice questions
- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

Unit: 7 Time Range: 20 Days

Standard(s) Addressed: CC. 6.3.7.B, CC. 6.3.7.D, CC. 6.3.8.B, CC. 6.3.8.D, CC. 6.3.9.B, CC. 6.3.12.C, CC. 6.3.C.D, CC. 6.3.U.C.

PA Academic Standards: 6.3.12.A, 6.3.12.B, 6.3.12.C, 6.5.12.D.

Big Idea(s):

• In the United States, the government has two major mechanisms which can be used to impact economic fluctuations – fiscal and monetary policy.

Essential Questions:

- What is the function of the Federal Reserve System?
- Who makes up the governing body of the Federal Reserve?
- What is monetary policy?
- Who controls the money supply, interest rates and the reserve ratios?

Concepts:

• The federal government's fiscal policy and Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

Competencies:

• Identify reasons for and impact of monetary and fiscal policies.

Overview:

Promote understanding of the function of money and the responsibility of the Federal Reserve System and monetary and monetary policy.

Goals:

- Students will be able to differentiate between the types of monies.
- Students will be able to analyze and connect the impact of the federal government's fiscal policy both in the short and long run economy.
- Students will be able to analyze the connect the impact of the Federal Reserve System on monetary policy both in the short and long run economy.
- Students will be able to assess the shifts in money supply on the economy.

- Students will analyze the impact of government spending changes on the economy. (DOK- Level Four)
- Students will connect the effect of changes in taxes on the economy. (DOK- Level Four)
- Students will compare the embedded fiscal policy tools and explain how the tools adjust the economy. (DOK- Level Three)
- Students will analyze the properties of money. (DOK- Level Three)
- Students will compare the functions of money. (DOK- Level Three)
- Students will analyze the definitions of money used in the United States. (DOK Level Four)

- Students will compare the concept of near-monies. (DOK- Level Three)
- Students will assess the equation of exchange. (DOK- Level Three)
- Students will analyze the variables in the equation of exchange. (DOK- Level Four)
- Students will connect how changes in the money supply are translated into changes in nominal GDP, prices and output. (DOK Level Four)
- Student will assess the alternative methods of analyzing fiscal policy effects. (DOK Level Three)

Students will be able to:

- Explain the impact of government spending changes on the economy.
- Explain the effect of changes in taxes on the economy.
- Describe the embedded fiscal policy tools and explain how the tools adjust the economy.
- Explore the alternative methods of analyzing fiscal policy effects.
- Explain why production limits consumption in the long run.
- List and explain the factors of production.
- Explain seven areas of policy action that may influence a country's productivity and growth.
- Explain why some job search unemployment is inevitable.
- Diagram the impact of the minimum wage on high-wage and low-wage sectors.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

- Review packets and terminology
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- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

Unit: 8 Time Range: 25 Days

Standard(s) Addressed: CC.6.5.5.D, CC.6.5.5.F, CC.6.5.6.D, CC.6.5.7.D, CC.6.5.7.F, CC.6.5.8.D, CC.6.5.8.F, CC.6.5.9.D, CC.6.5.9.F, CC.6.5.12.C, CC.6.5.12.F, CC.6.5.U.F.

PA Academic Standards: 6.1.12.D, 6.2.12.F, 6.3.12.B, 6.5.12.D, 6.5.12.G, 6.5.12.H

Big Idea(s):

Use of research to investigate, formulate, and present findings on a particular economic topic.

Essential Questions:

- What are the economics of a particular industry, phenomenon, or topic?
- How do the economics of this subject relate to the macroeconomy as a whole?

Concepts:

• The resources, costs, benefits, opportunity costs, and government role in this specific topic.

Competencies:

 Construct a presentation on an economic topic. Research and instruct the class on the subject matter.

Overview:

Students will choose a topic and conduct in-depth research on the subject, formulating a presentation on the material.

Goals:

- Students will choose a subject matter and research its economic characteristics.
- Students will employ various economic terms and skills developed during the course to formulate a comprehensive report on the material.
- Students will relate the economy of the topic as to how it fits into macroeconomics.
- Students will present the material to the class and be able to defend his/her findings.

- Students will research the economics of a topic of their choice and instructor approval. (DOK- Level Three)
- Students will analyze the economics of the topic. (DOK- Level Four)
- Students will critique the selection of the topic by preparing a detailed report. (DOK Level Three, DOK- Level Four)
- Students will assess the economics of the topic as it pertains to opportunity costs. (DOK Level Four)
- Students will analyze investment terms and perspective of the subject matter. (DOK- Level Four)
- Students will analyze how economic events affect that market and others. (DOK- Level Three)
- Students will compare the effects of monetary and fiscal policy on the market. (DOK- Level Three)

Students will be able to:

- Choose a topic of economic interest.
- Explain and validate the reason for choice of researched topic.
- Analyze the economics of the subject matter.
- Create a presentation detailing the economics of the topic.
- Explain the topic through written research paper.
- Present the researched information.
- Instruct the class on the subject matter.
- Defend accumulated material on the subject matter.

Assessments:

Diagnostic:

- Warm-Up: Define unit terminology
- Daily Agenda: Notes, practice questions, graphing and analyzing problems
- Class Discussion: Review of problems and means of solving.

Formative:

- Notes
- Unit outline
- Formulas
- Graphs
- Class discussions
- Current events articles relating to topic

Summative:

- Review packets and terminology
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- http://w.w.whitenova.com/thinkEconomics/ online for review and more practice questions
- Tutoring to provide more direct instruction and modeling of graphs, equations and formulas.

Primary Textbook(s) Used for this Course of Instruction

Name of Textbook: Name of Textbook: Krugman's Economics AP*

Textbook ISBN #: 978-1-4292-1872-6

Textbook Publisher & Year of Publication: Worth Publishers & 2011

Curriculum Textbook is utilized in (title of course): AP Economics

DELAWARE VALLEY SCHOOL DISTRICT

Appendix

Materials and Resources:

- Advanced Placement Economics Macroeconomics: Student Activities. Morton and Goodman. The Golden Sachs Foundation. Council for Economic Education. 2009 ISBN: 978-56183-567-6
- Advanced Placement Economics Microeconomics: Student Activities. Morton and Goodman. The Golden Sachs Foundation. Council for Economic Education. 2003 ISBN: 1-56183-568-4
- Multiple-Choice & Free-Response Questions in Preparation for the AP economics Examination. D&S Marketing Systems, Inc. 2007 ISBN: 0-9787199-8-0
- Strive for a 5: Preparing for the Microeconomics AP* Examination. Worth Publishers/BFW. 2012 ISBN 10: 1-4292-6453-5
- Strive for a 5: Preparing for the Macroeconomics AP* Examination. Worth Publishers/BFW. 2012 ISBN 10: 1429263598
- Economics by Example. Worth Publishers. 2007 ISBN-13: 978-0-7167-6934-7

View the standards at WWW.PDESAS.ORG/STANDARD