## **High School: Economics Standards**

## Introduction

In high school, the economics standards explore how people satisfy unlimited wants with scarce resources through the concepts of economic decision making. Students explore economic issues at both the micro- and macroeconomic levels using graphs, charts and data to analyze, describe and explain economic concepts. By developing economic inquiry skills, students apply their conceptual knowledge through questioning, investigating, using evidence and communicating conclusions so they are equipped with the knowledge and skills needed to be economically informed, engaged citizens.

Concepts and Practices	Standards		
I: Questioning	HS.E.I.Q.1	Generate compelling questions to frame thinking, inquiry and/or understanding of key economic concepts.	
	HS.E.I.Q.2	Generate supporting questions to develop knowledge, understanding and thinking relative to key economic concepts framed by compelling questions.	
I: Investigating	Investigating	occurs through the exploration of the discipline strand standards.	
	HS.E.MI.1	Compare perfect competition, monopolistic competition, oligopoly and monopoly and how the extent of competition within various markets affects price, quantity and variety in production.	
E: Microeconomics	HS.E.MI.2	Analyze and graph the impact of supply and demand shifts on equilibrium price and quantities produced.	
	HS.E.MI.3	Analyze the roles of product and factor markets.	
	HS.E.MI.4	Compare the roles of consumers and producers in the product, labor and financial markets and the economy as a whole.	
	HS.E.MA.1	Evaluate how values and beliefs like economic freedom, equity, full employment, price stability, security, efficiency and growth help to form different types of economic systems.	
E: Macroeconomics	HS.E.MA.2	Analyze ways in which competition and government regulation influence what is produced and allocated in an economy.	
	HS.E.MA.3	Describe the externalities of government attempts to remedy market failure and improve market outcomes through fiscal policy.	

Concepts and Practices	Standards			
	HS.E.MA.4	Analyze the impact of fiscal policies, various government taxation and spending policies on the economy.		
E: Macroeconomics (continued)	HS.E.MA.5	Assess how interest rates influence borrowing and investing.		
	HS.E.MA.6	Assess the effectiveness of rules and laws that protect both consumers and producers.		
	HS.E.MA.7	Explain how the Federal Reserve uses monetary policy to promote price stability, employment and economic growth.		
E: Specialization, Trade and	HS.E.ST.1	Draw conclusions regarding the effect of specialization and trade on production, distribution and consumption of goods and services for individuals, businesses and societies.		
Interdependence	HS.E.ST.2	Analyze the role of comparative advantage in international trade of goods and services.		
	HS.E.ST.3	Explain how international economic trends and policies affect political, social and economic conditions in various nations.		
	HS.E.IC.1	Predict the way scarcity causes individuals, organizations and governments to evaluate tradeoffs, make choices and incur opportunity costs.		
E: Incentives, Choices and Decision	HS.E.IC.2	Evaluate how individuals, organizations and governments respond to incentives in the decision-making process.		
Making	HS.E.IC.3	Perform a cost-benefit analysis on a real-world situation, using economic thinking to describe the marginal costs and benefits of a particular situation.		
	HS.E.IC.4	Evaluate how incentives determine what is produced and distributed in a competitive market system.		
	HS.E.KE.1	Explain the impact of varying market structures on profit, price and production in Kentucky.		
E: Kentucky Economics	HS.E.KE.2	Analyze how national and international trends and policies impact Kentucky's state and local economies.		
	HS.E.KE.3	Analyze how the four components of Gross Domestic Product (GDP) are combined to assess the health of Kentucky's economy.		

Concepts and Practices	Standards		
	HS.E.I.UE.1 Evaluate the credibility of multiple sources representing a variety of perspectives relevant to compelling and/or supporting questions in economics.		
I: Using Evidence	HS.E.I.UE.2 Gather information and evidence from credible sources representing a variety of perspectives relevant to compelling and/or supporting questions in economics.		
	HS.E.I.UE.3 Use appropriate evidence to construct and revise claims and counterclaims relevant to compelling and/or supporting questions in economics.		
	HS.E.I.CC.1 Engage in civil discussion, reach consensus when appropriate and respect diverse opinions relevant to compelling and/or supporting questions in economics.		
I: Communicating Conclusions	HS.E.I.CC.2 Engage in disciplinary thinking and construct arguments, explanations or public communications relevant to compelling and/or supporting questions in economics.		
	HS.E.I.CC.3 Engage in disciplinary thinking and apply appropriate evidence to propose a solution or design an action plan relevant to compelling and/or supporting questions in economics.		

## **High School Economics: Disciplinary Clarifications and Instructional Support**

The disciplinary clarifications include sample ideas of content and concepts to help teachers better understand the expectations of the standards. The identified disciplinary clarifications are possible suggestions; however, they are not the only pathways and are not comprehensive to obtain mastery of the standards.

## **Economics Disciplinary Strand**

<b>Concepts and Practices</b>		Standard	Disciplinary Clarifications
E: Microeconomics	HS.E.MI.1	Compare perfect competition, monopolistic competition, oligopoly and monopoly and how the extent of competition within various markets affects price, quantity and variety in production.	The levels of competition vary with the barriers of entry into a market. For example, monopolies for public utilities or oligopolies in industries (such as automobile manufacturing or oil and gas exploration) have high barriers to entry because a large amount of capital is needed to enter these markets. In emerging industries, like computer and internet technology, the barriers to entry are often much lower, as the internet, cloud computing and mobile phone access make it possible for entrepreneurs to access large markets with little capital investment. For example, traditional journalism and printing technology has a high barrier to entry, as writers must be hired, expensive printing equipment purchased, and large distribution networks established. New internet-based communication forms have a lower barrier to entry, as a single writer can post and host their work at places such as low-cost blog sites and social media platforms.  Perfect competition is an ideal in which buyers and sellers are extremely numerous and well informed. Although perfect markets do not exist in the real world, the ideal can be used for comparison of markets as they actually operate. Monopolistic competition involves many producers, but their products are widely differentiated, meaning buyers cannot purchase an equivalent product or service from another vendor. Monopolistic competition generally has low barriers of entry.  Oligopolies are markets with limited competition because there are only a small number of producers or sellers. A monopoly exists when a specific person or enterprise is the only supplier of a particular commodity. The closer a market comes to the ideal of perfect competition, the better consumers' prices and access to quantity and variety in production become.

<b>Concepts and Practices</b>	Standard		Disciplinary Clarifications
HS.E.MI.2 Analyze and graph the impact of supply and demand shifts on equilibrium price and quantities produced.	demand shifts on equilibrium price and	The discovery and utilization of new oil reserves would cause an outward shift in the supply curve due to an increase in quantity oil and decrease in oil prices. In times of economic hardship, the demand for luxury goods (personal electronics, trending styles) would decrease or shift the demand curve due to a decrease in quantity demanded and the price of these items. On the other hand, some items do not have much price elasticity, meaning the demand does not respond to price in the way it usually does with goods which have high price elasticity. For example, insulin is fairly price inelastic. In other words, an increase or decrease in the price of insulin and other inelastic goods has a smaller effect on the demand for that product.	
E: Microeconomics (continued)	HS.E.MI.3 HS.E.MI.4	Analyze the roles of product and factor markets. Compare the roles of consumers and producers in the product, labor and financial markets and the economy as a whole.	Product markets involve the production of goods and services by producers for consumers. Factor markets are those markets in which the factors of production (land, labor, capital and entrepreneurial skill) are bought and sold. Consumers drive the product market through choices about what and how much they buy. Producers try to anticipate consumer needs and receive signals from consumers about what products and services to sell and at what price. In addition, producers often attempt to stimulate demand among consumers by expanding their target market. For example, when a technology company enhances the function and capability of its product in order to induce more sales, more people may now be attracted to the product. In the labor market, households or individuals offer their labor for sale and businesses pay for their labor to help produce goods and services. In the financial market, stocks and commodities are bought and sold and capital is lent to businesses.

<b>Concepts and Practices</b>	Standard		Disciplinary Clarifications
	HS.E.MA.1	Evaluate how values and beliefs like economic freedom, equity, full employment, price stability, security, efficiency and growth help to form different types of economic systems.	Economic systems are created to address a country's cultural values, government processes and the needs of citizens, and are affected in that development by both resources and geography. The degree of government involvement in their economy varies from country to country. For example, China has more government control, which could create more stability in prices and employment but may also stifle the ability of individuals to innovate with new ideas and businesses. In the case of Singapore, strong free markets and less government control allows citizens more freedom and innovation but also less top-down direction.
E: Macroeconomics  HS.E.MA.2 Analyze ways in which competition and government regulation influence what is produced and allocated in an economy.	competition and	Markets do not allocate resources efficiently if: (1) property rights are not clearly defined or enforced; (2) externalities (spillover effects) affecting large numbers of people are associated with the production or consumption of a product; or (3) markets are not competitive. Market competition often declines in the case of government-capital cronyism, in which industries use political influence to create protectionist policies that decrease competition in their industry.	
	When markets do not allocate resources effectively, some governments enforce regulations in an attempt to maintain effective levels of competition and resource allocation. Regulations on maintaining clean air and water restrict manufacturers dumping pollutants into waterways or expelling chemicals into the air in the production process. Competition among firms for consumers' business can lead to increased quality in goods and services produced, lower prices for goods and services produced and wider variety of goods and services produced.		
	HS.E.MA.3	Describe the externalities of government attempts to remedy market failure and improve market outcomes through fiscal policy.	Externalities exist when some of the costs or benefits associated with production and consumption fall on someone other than the producers or consumers of the product. For example, increasing the minimum wage for workers may cause firms to automate processes or cut hiring or hours as a way to save money.

<b>Concepts and Practices</b>		Standard	Disciplinary Clarifications
	HS.E.MA.4	Analyze the impact of fiscal policies, various government taxation and spending policies on the economy.	Fiscal policies are decisions to change spending and taxation levels by the federal government. Such decisions are supported to influence national levels of output, employment and prices. If the government increased spending during times of recession, they could stimulate economic activity, such as New Deal legislation. However, limiting any government intervention in the economy could mean lowering taxes in order to encourage people and businesses to produce and spend.
HS.E.MA.5 Assess how interest rates influence borrowing and investing.  HS.E.MA.6 Assess the effectiveness of rules and laws that protect both consumers and producers.  HS.E.MA.7 Explain how the Federal Reserve uses monetary policy to promote price stability, employment and economic growth.  HS.E.MA.7 Explain how the Federal Reserve can buy or sell securities decreasing the amount of money in circulation and stimulates growth. In also impact growth. Lowering rates can lead to spending, which stimulates economic growth.	Interest rates are the cost of borrowing money and the incentive for saving. When interest rates are high, it is expensive to borrow money so people do not do it as often. Instead, individuals are encouraged to save money because they can earn higher returns. When interest rates are low, it is cheap to borrow money so people may take out loans to purchase homes, cars or appliances, or they might start or expand a business.		
	HS.E.MA.6	rules and laws that protect both consumers and	In an attempt to protect consumers from unsafe products and the rights and responsibilities of producers, the government creates rules and laws. For example, the Department of Agriculture provides oversight of the food industry to ensure consumer safety and confidence in the products. Such regulations might slow production but protect workers.
	HS.E.MA.7	Reserve uses monetary policy to promote price stability, employment and	The Federal Reserve can buy or sell securities as a means of increasing or decreasing the amount of money in circulation. Buying securities puts more money in circulation and stimulates growth. Influencing interest rates can also impact growth. Lowering rates can lead to more borrowing and spending, which stimulates economic growth. The Federal Reserve must face the effects of inflation. If inflation is too high, the Federal Reserve will try to slow growth in order to combat the issue.

<b>Concepts and Practices</b>	Standard		Disciplinary Clarifications
	HS.E.ST.1	Draw conclusions regarding the effect of specialization and trade on production, distribution and consumption of goods and services for individuals, businesses and societies.	Specialization by people into particular areas allows them to participate in the production of a good or service. The U.S. specializes in agriculture, but farmers in the U.S. grow staples like wheat, corn and soybeans rather than coffee, which can only be produced in certain climates. Therefore, the U.S. can sell wheat, corn and soybeans internationally, while importing coffee. In places with a comparative advantage for producing coffee, specializing in that product results in more efficiency and lower costs. By specializing and then trading with those specializing in other items, every area benefits as efficiency and cost savings are shared across the board.
E: Specialization, Trade and Interdependence	HS.E.ST.2	Analyze the role of comparative advantage in international trade of goods and services.	Because of the increased efficiency and thus lower costs of specialization based on comparative advantage, the world economy is globalized and interconnected. This can lead to positives like incentivizing nations to cooperate rather than fight because of mutual reliance. However, negative economic trends in one area can have a ripple effect on local markets and politics of faraway places as the interconnectedness of economies can result in changes in one area to affect places far away.
	HS.E.ST.3	Explain how international economic trends and policies affect political, social and economic conditions in various nations.  (see "continued")	Nations in the modern world are affected by the interconnectedness of economies, which causes ripple effects across borders. In addition, economic ideas can influence political and society conditions within nations. For example, the rise of laissez-faire capitalism and the later rise of command economies in places like the USSR influenced politics and societies across the globe. The principles of free market capitalism and protection of private property spurred innovation and sharp increases in global wealth through trade and later through industrialization. The idea that free competition based on industry being attuned to the needs and desires of the consumer has produced a modern world which is far wealthier and healthier than in any previous era.

<b>Concepts and Practices</b>	Standard	Disciplinary Clarifications
E: Specialization, Trade and Interdependence (continued)	HS.E.ST.3 Explain how international economic trends and policies affect political, social and economic conditions in various nations. (continued)	In places like Singapore and Korea following WWII, laissez-faire economic policies allowed the transformation of weak and poor colonies into economically strong and innovative nation-states. Critiques of the inequalities produced by free markets led some to seek alternatives. In the case of command economies, the idea that bureaucrats can create less-volatile economic systems and more equal social conditions through top-down planning led to catastrophic failures. Some examples are the famine following China's Great Leap Forward of the 1950s or Cuba's revolutionary era of economic collapse and political repression following the takeover of their government in 1959 by Fidel Castro. In other cases, moderate levels of top-down planning and government guidance of the economy have been considered a successful alternative to fully laissez-faire economies. In some cases, free markets are combined with strong government protection, an idea which gained traction during the post-WWII era in places like Sweden, which have led to strong levels of social mobility as well as economic prosperity.
E: Incentives, Choices and Decision Making	HS.E.IC.1 Predict the way scarcity causes individuals, organizations and governments to evaluate tradeoffs, make choices and incur opportunity costs.	Individuals, organizations and governments have scarce resources to trade and purchase goods and services. As a result, they make decisions according to their priorities. Individuals might prioritize purchasing food over buying new clothes. The tradeoff they made was eating rather than being fashionable. Being less fashionable was the opportunity cost incurred by purchasing food. Governments also have to prioritize their spending with a limited budget. Every dollar spent on a government priority, such as military or education, has an opportunity cost, as the money could have been spent on something else.
	HS.E.IC.2 Evaluate how individuals, organizations and governments respond to incentives in the decision-making process.	Analyzing the costs and benefits of various actions leads to informed economic decisions. Some examples are: considering to stay up an extra hour of studying for a test or to go to sleep and be more focused in the morning; deciding to finance the purchase of a new car or continue to save money and make repairs on current vehicle; or, deciding to allocate government money to education or military.

<b>Concepts and Practice</b>	s	Standard	Disciplinary Clarifications
E: Incentives, Choices and Decision Making (continued)	HS.E.IC.3 Perform a cost-benefit analysis on a real-world situation, using economic thinking to describe the marginal costs and benefits of a particular situation.		Incentives are designed to encourage individuals, organizations and governments to make certain decisions. For example, subsidies are government attempts to promote certain individual or organizational actions. Agriculture subsidies encourage farmers to grow and sell less or more of a product based on surplus or shortage. Incentives can also have unintended consequences that emerge. Conversely, excise taxes discourage individuals from purchasing products that are considered unhealthy. Increased taxes on cigarettes hope to discourage usage.
	HS.E.IC.4	Evaluate how incentives determine what is produced and distributed in a competitive market system.	In order to drive a competitive market, the government incentivizes businesses by offering various resources (tax breaks, land incentives, lower interest rates) to locate and produce within their territory. For example, a community may offer land incentives to a business to relocate a factory to their community.
	HS.E.KE.1	Explain the impact of varying market structures on profit, price and production in Kentucky.	When considering the impacts of varying market structures in Kentucky, agricultural based (daily, hemp, horse racing) industries can be analyzed in terms of their production, price and profit.
E: Kentucky Economic	HS.E.KE.2	Analyze how national and international trends and policies impact Kentucky's state and local economies.	As the U.S. and world interact in a global economy, political policy can impact Kentucky economic conditions. For example, the growth of the bourbon industry in Kentucky can be negatively impacted by an increase in foreign tariffs.
	HS.E.KE.3	Analyze how the four components of Gross Domestic Product (GDP) are combined to assess the health of Kentucky's economy.	When considering the GDP of Kentucky, investment, consumption, government and net exports must be analyzed to evaluate its productivity. Studying the GDP components in a historical timeframe and comparing them to the export of Kentucky-based products provides a greater awareness of the economic health of Kentucky.