



**Course Title:** Agricultural Economics

**Grade Level:** 9-12

**Course Description:**

*This course is applicable to the economics graduation requirement.*

Why is there world hunger or why is energy so expensive? How are natural resources distributed and how are wildlife populations managed? How does ethanol, or additional alternative uses for commodities, affect agriculture and food prices? Economics is the study of how people coordinate their wants and desires, given scarce resources and the decision-making mechanisms, social customs, and political realities of their societies. Decisions made by consumers, farmers, agricultural businesses, investors and the government interact to determine the allocation of scarce resources. Economics is a way of thinking about the world based on a set of principles that are useful for understanding almost any economic situation, from decisions that individuals make to the workings of highly complex international financial markets. The basics of supply, demand, price determination, world trade, public policy, and the economics of food safety will all be covered in this course. The economics of day-to-day living, saving and investing for your future, and the use of the stock market will also be included in this course. These concepts will be taught using hands-on learning activities, market simulations, and interactive group scenarios.

**Recommended Text(s) & Resources:**

- Virtual Economics (CD Resources of Lesson Plans) – <http://ve.ncee.net>
- Global Food Challenge (Free) - <http://www.mcee.umn.edu/programs/gfc-requirements.html>
- Holt Economics (CD Resources Lesson Plans)- [http://www.go.hrw.com/hrw.nd/hrw\\_catalog/](http://www.go.hrw.com/hrw.nd/hrw_catalog/)
- Minnesota K-12 Economic Systems Framework - [http://education.state.mn.us/MDE/Academic\\_Excellence/Academic\\_Standards/Social\\_Studies/](http://education.state.mn.us/MDE/Academic_Excellence/Academic_Standards/Social_Studies/)
- Arnold, Roger A. (2007). *Economics - New Ways of Thinking*. St. Paul, MN: EMC Publishing.
- Little, Randall D. (1997). *Economics Applications to Agriculture and*. Upper Saddle River, NJ: Prentice Hall. (Out of Print)
- Commodity Challenge – Chicago Board of Trade (Available on MyCAERT)
- FFA Risk Management Essay Contest - [http://www.ffa.org/index.cfm?method=c\\_programs.RiskManagement](http://www.ffa.org/index.cfm?method=c_programs.RiskManagement)

## Alignment with Minnesota Academic Standards or national/state content standards:

- Minnesota Agricultural Education Program Standards
- Minnesota Technical Careers/ Occupations Program Standards
- Minnesota Academic Standards – Economics Grades 9-12:

Strand	Sub-Strand	Standards	Benchmarks
VI. ECONOMICS	A. The Market Economy (Micro Economics)	1. The student will understand that in a market economy income is earned in different ways.	1. Students will identify multiple forms of income and their sources 2. Students will recognize types and roles of firms.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	2. The student will understand business organizations, market structures, and financial institutions that operate within our economy.	1. Students will identify and compare and contrast various industries and the occupations related to them. 2. Students will compare and contrast the concepts of competition and monopoly, and predict consequences of each. 3. Students will describe various financial institutions, compare and contrast their roles, and explain how those institutions relate to their lives.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	3. The student will understand the basic characteristics of markets and the role of prices in modern market economies.	1. Students will describe the determination of equilibrium market prices by applying principles of supply and demand to markets for goods and services. 2. Students will identify the direct and indirect effects of price floors and price ceilings. 3. Students will identify several factors that lead to variation in market prices and quantities exchanged by changes in supply and/or demand. 4. Students will explain how interest rates and exchange rates are influenced by market conditions and how changes in interest rates affect individual and business decision making.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	4. The student will understand that firms in a market economy experience varying degrees of competition for the good or service that they sell.	1. Students will explain how competition among sellers often results in lower prices, higher product quality, better customer service and a more efficient allocation of scarce resources.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	5. The student will understand the risks and opportunities associated with entrepreneurship.	1. Students will explain that entrepreneurs accept the risks associated with organizing productive resources to produce goods and services, with the hope to earn profits. 2. Students will describe the role of innovation and profit motive in helping to reduce problems associated with scarcity.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	6. The student will understand the role of labor in the economy.	1. Students will describe the role and characteristics of collective bargaining, as well as the key components of a typical negotiated labor management contract. 2. Students will describe and analyze the role of unions in the United States economy in the past and present.
VI. ECONOMICS	A. The Market Economy (Micro Economics)	7. The student will understand the economic role of government in a free market economy.	1. Students will identify that one important role for government in the economy is to secure and enforce property rights. 2. Students will identify and explain public goods. 3. Students will recognize that, in the United States, the federal government enforces antitrust laws and regulations to try to maintain effective levels of competition in as many markets as possible. 4. Students will recognize that some government policies attempt to redistribute income.
VI. ECONOMICS	B. The National Economy (Macro Economics)	1. The student will understand the economic activities of government.	1. Students will explain that the government pays for the goods and services it provides through taxing and borrowing. 2. Students will explain how the government regulates economic activity to promote the public welfare, encourage competition, and protect against monopolistic abuses.
VI. ECONOMICS	B. The National Economy (Macro Economics)	2. The student will understand the concepts that measure the national economy.	1. Students will define and give examples of basic economic terms. 2. Students will give examples of measurements that indicate the economic conditions of depression, recession, and expansion.
VI. ECONOMICS	B. The National Economy (Macro Economics)	3. The student will understand and explain that the United States' economy is primarily a free market system.	1. Students will understand and explain that free market economies are regulated primarily by supply and demand, and that competition is essential to a free market economy.

<b>VI.</b> ECONOMICS	<b>B.</b> The National Economy (Macro Economics)	4. The student will understand basic measures of overall economic performance.	<ol style="list-style-type: none"> <li>1. Students will analyze the interrelationships among the unemployment rate, the inflation rate, and the rate of economic growth.</li> <li>2. Students will describe how the concept of the balance of trade is used to measure the international flow of goods and services.</li> </ol>
<b>VI.</b> ECONOMICS	<b>B.</b> The National Economy (Macro Economics)	5. The student will analyze the causes and consequences of overall economic fluctuations.	<ol style="list-style-type: none"> <li>1. Students will describe the basic characteristics of economic recessions and economic expansions.</li> <li>2. Students will understand some of the reasons for fluctuations in economic activity.</li> </ol>
<b>VI.</b> ECONOMICS	<b>B.</b> The National Economy (Macro Economics)	6. The student will understand the influence of federal government budgetary policy and the Federal Reserve System's monetary policy.	<ol style="list-style-type: none"> <li>1. Students will identify that fiscal policies are decisions to change spending and/or tax levels by the federal government.</li> <li>2. Students will explain the direct and indirect effects of fiscal policy on employment, output, and interest rates.</li> <li>3. Students will explain the relationship between federal budget deficits and the national debt.</li> <li>4. Students will identify the ways in which monetary policy influences employment, output, inflation, and interest rates.</li> <li>5. Students will explain how interest rates influence business investment spending and consumer spending on housing, cars, and other major purchases.</li> </ol>
<b>VI.</b> ECONOMICS	<b>B.</b> The National Economy (Macro Economics)	7. The student will understand that economic growth is the primary means by which a country can improve the future economic standard of living for its citizens.	<ol style="list-style-type: none"> <li>1. Students will explain that Gross Domestic Product (GDP) per capita is a measure that permits comparisons of material living standards over time and among people in different nations.</li> <li>2. Students will identify that the productivity of workers is measured by dividing the output of goods and services by the number of hours worked.</li> <li>3. Students will recognize that standards of living increase as the productivity of workers rises.</li> <li>4. Students will understand that investments in physical capital (machinery, equipment, and structures), human capital (education, training, skills), and new technologies commonly increase productivity and contribute to an expansion of future economic prosperity.</li> </ol>
<b>VI.</b> ECONOMICS	<b>C.</b> Essential Skills	1. The student will understand and use economic concepts, theories, principles and quantitative methods to analyze current events.	<ol style="list-style-type: none"> <li>1. Students will use tables, graphs, equations, diagrams, and charts to interpret economic information.</li> <li>2. Students will evaluate the economic implications of current issues as found in such sources as magazine articles, radio and television reports, editorials, and Internet sites.</li> <li>3. Students will distinguish among the contributions to economic thought made by leading theorists including but not limited to, Adam Smith, Thomas Malthus, Karl Marx, Milton Friedman, and John Maynard Keynes.</li> </ol>
<b>VI.</b> ECONOMICS	<b>C.</b> Essential Skills	2. The student will learn and be able to apply personal financial management and investment practices	<ol style="list-style-type: none"> <li>1. Students will analyze short- and long-term investment options such as stocks, bonds, real estate, and mutual funds by comparing the risk, return, and liquidity of these instruments.</li> <li>2. Students will recognize a proper role for credit and how to utilize risk management strategies including the use of insurance.</li> <li>3. Students will explain the concepts of compound interest and the Rule of 72, and the applicability to both investment gains and debt retirement.</li> </ol>
<b>VI.</b> ECONOMICS	<b>D.</b> International Economic Relationships	1. The student will understand the key factors involved in the United States' economic relationships with other nations.	<ol style="list-style-type: none"> <li>1. Students will understand and apply the concepts of comparative and absolute advantage in international trade.</li> <li>2. Students will analyze the controversy and major arguments for and against international trade agreements such as NAFTA and GATT.</li> <li>3. Students will know the major characteristics of the principal types of economic systems in this world and compare and contrast them with the U.S. system.</li> <li>4. Students will know and understand the significance of these concepts: trade deficits, exchange rates, trade barriers, balance of trade, foreign exchange markets, and give examples of their current application to U.S. trade relationships with other countries in the world.</li> <li>5. Students will know the roles of the World Bank and IMF, analyze their effectiveness in the world community, and critique their operation in a specific country.</li> <li>6. Students will examine the impact of U.S. foreign policy on the economies of developing countries.</li> <li>7. Students will know and analyze the reasons some countries are characterized</li> </ol>

			<p>as developing nations.</p> <p>8. Students will examine the purpose and evaluate the effectiveness of U.S. economic aid to developing countries.</p>
<p><b>VI.</b> ECONOMICS</p>	<p><b>E.</b> Economics and Public Policy</p>	<p>1. The student will apply economic theories and concepts to public policy issues.</p>	<p>1. Students will know the definitions, evaluate the purposes, and analyze the effects of the following economic activities: government subsidies, government incentives, economic externalities, profit maximization, multinational corporations, unions, right to work laws, government deregulation, entitlements, progressive taxes, government's role in providing in public goods, economic safety nets, and corporate crime.</p> <p>2. Students will use their knowledge of economic concepts and data to analyze a significant national public policy issue and recommend a solution.</p> <p>3. Students will know and analyze how income, and wealth are distributed among different sectors of the population.</p> <p>4. Students will know how poverty is defined in the U.S., what its causes are, examine possible solutions, and analyze the impact poverty has on the short and long run health of the economy.</p> <p>5. Students will use their knowledge of economics to describe and analyze significant world economic issues.</p> <p>6. Students will use the analytical skills commonly used in economics to analyze public policy issues in their community, state, and nation.</p> <p>7. Students will identify and analyze the conflicts that can result from differences between business interests and community interests.</p> <p>8. Students will examine and analyze the economic principles practiced in this country to determine their consistency with the democratic principles upon which our country is based.</p>

**Specific Course Learner Outcomes:**

Students will:

1. Meet all of the Minnesota Academic Standards for Economics grades 9-12 (listed above)
2. Analyze the complex relationships of agricultural economic factors
3. Understand the global role of agriculture in economic systems
4. Participate in leadership and service learning opportunities through FFA
5. Conduct a quality Supervised Agricultural Experience Program.
6. Evaluate the relationship between a Supervised Agricultural Experience Program and a future career.

## Course Outline:

1. Fundamentals of Economics (A3, A4, B3 & C1)
  - a. Scarcity & Choice
  - b. Opportunity Costs
  - c. Production/Possibilities Curve
  - d. Circular Flow of Economic Activity
  - e. Introduction of Differing Economic Systems (Free and Command Markets)
  
2. Fundamental Analysis of Food, Fiber and Natural Resources (A3, A4, B3, & C1)
  - a. Supply & Demand
  - b. Current Market Prices (Equilibrium)
  - c. Shortage
  - d. Surplus
  - e. Market Trends
  - f. Competition
  - g. *Suggested Activity* - Basic Economics of Food Markets (Global Food Challenge)
  - h. *Suggested Activity* – Commodity Challenge
  
3. Risk Management (A5, A6, A7, & C2)
  - a. Production Inputs & Outputs
  - b. Factors of Production (Land, Labor, and Capital)
  - c. Capital Goods
  - d. Consumer Goods
  - e. Production Possibilities Frontier
  - f. *Suggested Activity* - Economics of Food Safety (Global Food Challenge)
  - g. *Suggested Activity* – Risk Management Essay Contest
  
4. Money in Agri-Business Structures (A1, B3 & C1)
  - a. Income Sources
  - b. SAE (Placement & Entrepreneurship)
  - c. Invested Capital
  
5. Personal Finance (C2)
  - a. Budgeting
  - b. Investments
  - c. Debt
  - d. Credit
  - e. Security
  - f. Insurance
  - g. Career Salary
  
6. Organization of Agri-Business Structures (A2)
  - a. Co-op, Corporations, Partnerships, & Proprietorship
  - b. Farmers' market (competition), electric distribution (monopoly)
  - c. Banks, Credit Unions, Chicago Board of Trade, the Federal Reserve

7. The Government's Role (B1, B2, B4, B5, B6, & B7)
  - a. Goods and Services
  - b. Taxation
  - c. Depression, Recession, Inflation, & Expansion
  - d. Unemployment
  - e. Rate of Economic Growth
  - f. Market Failures
  - g. Fiscal Policy & Monetary Policy (ie Farm Program)
  - h. Federal Reserve
  - i. Gross Domestic Product
  - j. Consumer Price Index
  - k. Interest Rates
  - l. Debt
  
8. International Trade (C1, D1, E1)
  - a. Trade Policy (Agreements & Barriers)
  - b. Exchange Rate
  - c. *Suggested Activity* - Economics of World Food Trade (Global Food Challenge)
  
9. Economic Development (B4, B7, C1, D1, & E1)
  - a. Distribution of Wealth
  - b. Population Growth
  - c. Infrastructure
  - d. World Hunger
  - e. Impacts to the Environment
  - f. Agricultural Issues
  - g. Political Stability
  - h. *Suggested Activity* - Economics of Food Security (Global Food Challenge)
  
10. Supervised Agricultural Experience Program (SAE) (A1, A5, A6, & C2)
  - a. Formulate a quality SAE
  - b. Demonstrate learned skills and competencies as a result of the SAE
  - c. Building a connection between SAE and future career
  
11. Leadership & Career Development (A1, A2, A3, A4, A5, B2, C1, & C2)
  - a. FFA Career Development Events (Farm Business Management, Agricultural Issues, Agricultural Marketing, Agricultural Sales, & Prepared Public Speaking)
  - b. Career Exploration
  - c. Service Learning Opportunities

## Notes:

### Global Food Challenge

In Global Food Challenge, students explore issues such as: Who decides what food costs? Who benefits from sugar quotas? Is irradiated food safe to eat? Why do some countries experience famine while others don't?

Minnesota teachers are invited to submit up to two student entries in each Cargill Global Food Challenge unit to achieve recognition and earn financial awards. For each unit, the first place student will receive \$300 and second place \$150. Teachers of award-winning students will receive \$100.

**Basic Economics of Food Markets:** Learn the basics of supply, demand, and price determination through market simulations and other fun activities.

**Economics of Food Security:** How do public policies impact critical issues of hunger, famine, and nutrition. Activities are designed for students with different learning styles and backgrounds, including new Americans.

**Economics of World Food Trade:** Explore comparative advantage, specialization, currency exchange, and benefits and barriers to trade through engaging, hands-on activities.

**Economics of Food Safety:** How do economics around the globe affect the safety of the food on our tables? The impact of cost/benefit analysis, risk management, and government regulation are explored.

### Website Resources

- Minnesota Council on Economic Education – [www.mcee.umn.edu](http://www.mcee.umn.edu)
- National Council on Economic Education – [www.ncee.net](http://www.ncee.net)
- CME Group (Chicago Board of Trade & Chicago Mercantile Exchange) [www.Cmegroup.com](http://www.Cmegroup.com)
- Virtual Market Watch (Stocks) – [www.Virtualmarketwatch.com](http://www.Virtualmarketwatch.com)
- Mock Trading (Commodity Trading) – [www.mocktrading.com](http://www.mocktrading.com)
- USDA Foreign Ag Service (Commodity Imports & Exports) - [www.fas.usda.gov/ustrade/](http://www.fas.usda.gov/ustrade/)
- Economic Research Service (Commodity Data) - [www.ers.usda.gov/](http://www.ers.usda.gov/)
- World Fact Books (Country Statistics) - [www.cia.gov/library/publications/the-world-factbook/geos/ag.html](http://www.cia.gov/library/publications/the-world-factbook/geos/ag.html)
- Project on Human Development (Nutritional Indicators/Health) - <http://humandevlopment.bu.edu/>
- DTN
- UofM Department of Applied Economics - <http://www.apec.umn.edu/>
- APEC 3071 Agriculture and Economic Growth in Developing Countries - <http://www.apec.umn.edu/faculty/bsenauer/3071.html>
- The Facts (Free Monthly Economics Newsletter) – [www.cwpub.com/facts\\_subscribe.html](http://www.cwpub.com/facts_subscribe.html)
- NEFE High School Financial Planning Program (Personal Financial Planning) – <http://hsfpp.nefe.org>
- Buhr, Brian. *Commodity Marketing Analysis Project*, University of Minnesota – Available on MyCAERT