

AGRISCIENCE 01.0000.00 EMBEDDED ECONOMICS CROSSWALK

The AgriScience program The Mechanical Drafting program has been recognized by the Arizona State Board of Career and Technical Education (CTE) as being eligible for consideration by local governing boards to grant 0.5 credit of Economics. This document is the result of a committee analysis completed in 2019.

AgriScience Standards	Economics Standards	Reasoning/Rationale	
STANDARD 1.0 EXAMINE THE NATURE, SCOPE, AND ROLE OF AGRICULTURE IN THE SOCIETY AND THE ECONOMY			
1.1 Investigate the impact of the agricultural industry on population, food, energy, and environment	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E3.1 Explain how buyers and sellers interact to create markets and market structures. HS.E4.1 Use economic data to analyze the health of a national economy.	Allocation of limited resources Impact of production agriculture on the global economy Consumer Price Index/Business Cycle/Inflation Distribution of wealth	
1.2 Investigate the economic importance of products obtained from agriculture (i.e., animals, plants, technology, mechanics, etc.)	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E3.1 Explain how buyers and sellers interact to create markets and market structures. HS.E5.3 Explain why nations chose to trade and how it is regulated. HS.E5.4 Explain how national economies influence trade.	Economic impact of Arizona agriculture Impact of production agriculture Commodity/specialization/labor laws Absolute and comparative advantage	
1.3 Examine how a stable agricultural sector supports a nation of food security	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E4.1 Use economic data to analyze the health of a national economy. HS.E5.2 Evaluate how interdependence impacts individuals, institutions, and societies.	Agriculture sustainability Comparative and absolute advantage, economic indicators Industrialization and environmental imports and exports Globalization and World aide organizations Developing countries	

1.4 Differentiate between agricultural imports and exports	HS.E5.1 Evaluate the advantages and disadvantages of global trade. HS.E5.2 Evaluate how interdependence impacts individuals, institutions, and societies. HS.E5.3 Explain why nations chose to trade and how it is regulated. HS.E5.4 Explain how national	Advantages and disadvantages of imports and exports World Trade Organization Embargos/tariffs/trade barriers
1.5 Examine the benefit of earning foreign exchange through the export of agricultural products	HS.E5.1 Evaluate the advantages and disadvantages of global trade. HS.E5.2 Evaluate how interdependence impacts individuals, institutions, and societies. HS.E5.3 Explain why nations chose to trade and how it is regulated. HS.E5.4 Explain how national economies influence trade.	Gross domestic product (GDP) of agricultural exports Advantages and disadvantages of imports and exports Import and export interdependence Foreign exchange rate/exchange rates; comparative and absolute advantage International trade organizations (i.e., Free trade and NAFTA) Tariffs and trade embargos
1.6 Investigate how the agriculture sector provides employment opportunities to the labor force	HS.E4.1 Use economic data to analyze the health of a national economy.	Unemployment, labor force, and labor statistics
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 2.0 EXAMINE THE AGRICULTURE	IMPACT OF TRENDS, TECHNOLO	OGIES, AND POLICIES ON
2.1 Identify the major milestones and technological advancements on agriculture and the impact to society (e.g., advances in mechanization, quality seed and selective breeding, improved resource management, and higher quantity of food)	HS.E3.4 Explain the distinct types of business organizations and analyze the role of innovation and entrepreneurship in a market economy. HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living.	Evolution of agriculture (i.e., advances in mechanization, quality seed, and selective breeding) Improved resource management and efficiency of production
2.2 Describe the effects of genetic modification on agricultural production		
2.3 Describe the effects of current farming methods on water resources, erosion, and soil fertility		

2.4 Explain the effects of pesticides and fertilizers on water and the		
environment 2.5 Explain how legislation affects agricultural production (i.e., environmental, workforce, marketing, trade, animal welfare, biosecurity, taxes, water, etc.)	HS.E3.3 Evaluate the role of government in regulating marketplaces. HS.E4.2 Evaluate the economic conditions that lead to fiscal and monetary policy choices and explain their impact on households and businesses. HS.E4.3 Explain the roles of institutions in a market economy.	Role of government agencies in regulating agriculture Laws and economic changes Agricultural issues (i.e., animal welfare, water rights, private property rights, etc.) Marketing and labeling laws Taxes and trade agreements
2.6 Analyze the impact of biotechnology on production, processing, storage, and preparation of food, fiber, and pharmaceuticals	HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living.	FDA regulations on biotechnology
2.7 Use scientific evidence to investigate controversial topics and make educated decisions (i.e., environmental issues, climate change, genetic engineering, soil degradation, etc.)	HS.SP3.2 Gather relevant information from multiple sources representing a wide range of views while using origin, authority, structure, context, and corroborative value of the source to guide the selection. HS.SP3.8 Present arguments and explanations that feature ideas and perspectives on issues and topics to reach a range of audiences and venues using print, oral, and digital technologies.	Gather evidence and information from multiple sources Present agricultural issues (i.e., public speaking, presenting researched arguments to controversial topics, etc.)
2.8 Investigate the use of data to solve problems in agricultural systems (i.e., geographic, economic, demographic, etc.)	HS.E2.3 Use cost-benefit analysis and/or marginal analysis to evaluate an economic issue. HS.E4.1 Use economic data to analyze the health of a national economy. HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living. HS.SP3.2 Gather relevant information from multiple sources representing a wide range of views while using origin, authority, structure, context, and corroborative value of the source to guide the selection. HS.SP3.6 Construct and present arguments using precise and	Urbanization; Rural vs. Urban (i.e., population density, economic issues, GDP, subsidies, Farm Bill, etc.) Gather evidence and information from multiple sources Construct argument using evidence with agricultural issues Present agricultural issues investigating problems in agricultural systems (i.e., geographic, economic, demographic, etc.) AgriScience Fair

	knowledgeable claims, with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses.	
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 3.0 EXAMINE THE	USE OF SCIENTIFIC PROCESSES	S USED IN AGRICULTURE
3.1 Identify research methods used in agriculture		
3.2 Describe and demonstrate the scientific process		
3.3 Formulate predictions, questions, and hypotheses	HS.SP3.7 Construct and present explanations using sound reasoning, correct sequence (linear and non-linear) examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation. HS.SP3.8 Present arguments and explanations that feature ideas and perspectives on issues and topics to reach a range of audiences and venues using print, oral, and digital technologies.	Construct argument using evidence with agricultural issues Present agricultural issues (i.e., public speaking, presenting researched arguments to controversial topics, etc.)
3.4 Evaluate appropriate resources for research	HS.SP4.4 Compare the central arguments in secondary works on related topics in multiple media. Critique the central arguments in secondary works on related topics in multiple media in terms of their accuracy and relevance HS.SP3.4 Evaluate the credibility of a source by examining how experts value the source	Evaluate appropriate resources for credibility
3.5 Demonstrate safe practices in the laboratory, classroom, and work situations	•	
3.6 Design and conduct scientific investigations		
3.7 Record observations, notes, sketches, questions, and ideas during an investigation	HS.SP3.7 Construct and present explanations using sound reasoning, correct sequence (linear and non-linear) examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation.	Experimental design

	HS.SP3.8 Present arguments and	
	explanations that feature ideas and perspectives on issues and topics to reach a range of audiences and	
	venues using print, oral, and digital technologies.	
3.8 Generate data tables, charts, and graphs based on collected data	HS.SP3.7 Construct and present explanations using sound reasoning, correct sequence (linear and non-linear) examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation. HS.SP3.8 Present arguments and explanations that feature ideas and perspectives on issues and topics to reach a range of audiences and venues using print, oral, and digital technologies.	Experimental design
3.9 Analyze data, communicate results, conclusions, and propose further investigations	HS.SP3.7 Construct and present explanations using sound reasoning, correct sequence (linear and non-linear) examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation. HS.SP3.8 Present arguments and explanations that feature ideas and perspectives on issues and topics to reach a range of audiences and venues using print, oral, and digital technologies.	Experimental design
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 4.0 EXAMINE THE PRODUCTION AND SUSTAINAL	RELATIONSHIP OF THE ENVIRO	NMENT TO AGRICULTURE
4.1 Identify agricultural products that can be converted to alternative energy sources		
4.2 Analyze the use of renewable energy sources in agriculture (i.e., wind, solar, biofuels, etc.)	HS.E1.1 Evaluate how and why people make choices to improve their economic well-being.	Renewable energy as an alternative
4.3 Compare and contrast production practices with regard to efficiency, sustainability, and economic viability (i.e., organic, naturally raised systems,	HS.E1.1 Evaluate how and why people make choices to improve their economic well-being. HS.E2.2 Analyze how incentives influence economic choices for	Pros and cons of organic, naturally raised and conventional production regarding efficiency, sustainability, and economic viability

conventional agricultural production, etc.)	individuals, institutions, and societies. HS.E2.3 Use cost-benefit analysis and/or marginal analysis to evaluate an economic issue. HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living.	
4.4 Investigate how alternative production systems affect production and environment (i.e., aquaculture, vertical farming, GPS plotting, seed spacing, etc.)	HS.E1.1 Evaluate how and why people make choices to improve their economic well-being. HS.E2.3 Use cost-benefit analysis and/or marginal analysis to evaluate an economic issue.	Effects of aquaculture, vertical farming, GPS plotting, seed spacing Pros and cons of organic, naturally raised and conventional production regarding efficiency, sustainability, and economic viability
4.5 Identify municipal, industrial, and agricultural sources and uses of water		
4.6 Evaluate how agriculture manages water use, wastewater systems, and water recycling opportunities		
4.7 Analyze environmental factors associated with animal and plant production including sanitation and economics		
4.8 Describe the effect of agriculture on the food web cycle, or the natural interconnection of food chains		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 5.0 EXAMINE SOIL	MANAGEMENT FOR PLANT ANI	D ANIMAL PRODUCTION
5.1 Describe formation, properties, texture, structure, and composition of soil		
5.2 Examine the relationship among soil characteristics, microflora, and environmental conditions		
5.3 Analyze methods to control soil erosion		
5.4 Analyze slope, erosion, and water movement in determining land capability, land use, and agricultural production		

5.5 Formulate appropriate soil management practices on various sites		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 6.0 EXAMINE CELL	BIOLOGY, STRUCTURES, AND	PROCESSES
6.1 Differentiate among cells, organelles, tissues, and organs' systems		
6.2 Describe the structure and function of DNA		
6.3 Describe the process of creating proteins from DNA		
6.4 Describe cellular processes (i.e., osmosis, mitosis, phagocytosis, meiosis, diffusion, etc.)		
6.5 Examine the molecular basis of heredity and resulting genetic diversity		
6.6 Define the essential macromolecules of life science (i.e., carbohydrates, proteins, lipids, nucleic acids, etc.)		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDADD 70 ANALYZE DLAN	IT SCIENCE DRINCIPI ES	
STANDARD 7.0 ANALYZE PLAN	NI SCIENCE PRINCIPLES	
7.1 Describe plant anatomy and the functions of plant structures (e.g., root, stem, leaf, and flower)	NI SCIENCE PRINCIPLES	
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7.1 Describe plant anatomy and the functions of plant structures (e.g., root, stem, leaf, and flower) 7.2 Classify plants according to taxonomic systems, use, structure,	NI SCIENCE PRINCIPLES	
7.1 Describe plant anatomy and the functions of plant structures (e.g., root, stem, leaf, and flower) 7.2 Classify plants according to taxonomic systems, use, structure, and life span 7.3 Describe basic factors in plant growth (e.g., light, water, climate,	NI SCIENCE PRINCIPLES	
7.1 Describe plant anatomy and the functions of plant structures (e.g., root, stem, leaf, and flower) 7.2 Classify plants according to taxonomic systems, use, structure, and life span 7.3 Describe basic factors in plant growth (e.g., light, water, climate, temperature, and nutrients) 7.4 Apply knowledge of plant physiology and energy conversion to plant systems (e.g., photosynthesis, respiration, and	NI SCIENCE PRINCIPLES	

7.7 Investigate changes in growing conditions and the impact on plant growth and development (i.e., light, gravity, touch, water, heat, etc.)		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 8.0 DEMONSTRATE	CONCEPTS OF PLANT MANAG	SEMENT
8.1 Analyze the nutritional needs of plants		
8.2 Research common nutrient deficiency symptoms and treatment options (i.e., fertilizers, soil amendments, crop rotation, etc.)		
8.3 Prepare grow media for use in plant systems (i.e., soil, water, vermiculite, coconut core, etc.)		
8.4 Analyze soil conditions to make nutritional decisions (i.e., pH meter, soil test kits, soil probes, etc.)		
8.5 Implement a fertilization plan for specific plants or crops		
8.6 Investigate methods for sexual reproduction of plants (i.e., cross-pollination, scarification, stratification, etc.)		
8.7 Investigate methods for asexual reproduction of plants (i.e., propagation, grafting, layering, tissue culture, plant hormones, etc.)		
8.8 Demonstrate plant propagation techniques (e.g., sexual and asexual)		
8.9 Describe techniques to harvest, handle, and store crops according to current industry standards		
8.10 Create a sustainable management plan for plant production		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 9.0 ANALYZE ANIN	IAL SCIENCE PRINCIPLES	
9.1 Define common terminology related to animal science and production practices (i.e., gender, age, dehorning, castration, identification, tail docking, etc.)		

9.2 Classify animals according to taxonomic classification systems and use (e.g., agricultural and companion)		
9.3 Differentiate among large stock, small stock, and companion animals		
9.4 Explain basic anatomy and external parts of production animals		
9.5 Apply principles of comparative anatomy and physiology to use within animal systems (e.g., circulatory, endocrine, immune, integumentary, musculoskeletal, nervous, reproductive, respiratory, and urinary)		
9.6 Describe a livestock animal's digestive system (i.e., avian, modified digestion, ruminant, etc.)		
9.7 Describe the basic principles of animal welfare (e.g., appropriate environment, facilities, food, healthcare, proper handling, and		
water)		
	Economics Standards	Reasoning/Rationale
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AgriScience Standards STANDARD 10.0 DEMONSTRAT 10.1 Recognize animal behaviors to facilitate safely working with		, , , , , , , , , , , , , , , , , , ,
AgriScience Standards STANDARD 10.0 DEMONSTRAT 10.1 Recognize animal behaviors to facilitate safely working with animals 10.2 Investigate the nature and properties of food, fiber, and by-		, , , , , , , , , , , , , , , , , , ,
AgriScience Standards STANDARD 10.0 DEMONSTRAT 10.1 Recognize animal behaviors to facilitate safely working with animals 10.2 Investigate the nature and properties of food, fiber, and byproducts from animals 10.3 Differentiate between major wholesale/retail meat cuts of beef, pork, lamb, and poultry and compare the value of various meat		, , , , , , , , , , , , , , , , , , ,
AgriScience Standards STANDARD 10.0 DEMONSTRAT 10.1 Recognize animal behaviors to facilitate safely working with animals 10.2 Investigate the nature and properties of food, fiber, and byproducts from animals 10.3 Differentiate between major wholesale/retail meat cuts of beef, pork, lamb, and poultry and compare the value of various meat cuts 10.4 Explore the use of alternative livestock in animal agriculture (i.e., antelope, elk, buffalo, alpacas,		, , , , , , , , , , , , , , , , , , ,

10.7 Develop a plan to treat animal ailments		
10.8 Differentiate among animal selection, reproduction, breeding, and genetics		
10.9 Demonstrate animal selection based on reproduction, breeding, and genetics		
10.10 Explore how animals are evaluated for breeding readiness and soundness		
10.11 Create a sustainable reproduction management plan		
10.12 Demonstrate proper methods to clean and disinfect animal equipment and facilities		
10.13 Demonstrate proper use of animal medications following established withdrawal protocol		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 11.0 ANALYZE PRI	NCIPLES OF INTEGRATED PEST	T MANAGEMENT (IPM) IN
PLANT AND ANIMAL STSTEMS		
11.1 Identify pests and signs of pest damage (i.e., parasites, rodents, weeds, insects, etc.)		
11.1 Identify pests and signs of pest damage (i.e., parasites,		
11.1 Identify pests and signs of pest damage (i.e., parasites, rodents, weeds, insects, etc.) 11.2 Identify pest control methods used to manage pest damage (i.e., cultural, mechanical, biological,	HS.E3.2 Evaluate how numerous factors and conditions influence market prices.	Production loss and production possibilities curve Economic threshold (marginal utility)
11.1 Identify pests and signs of pest damage (i.e., parasites, rodents, weeds, insects, etc.) 11.2 Identify pest control methods used to manage pest damage (i.e., cultural, mechanical, biological, chemical, etc.) 11.3 Evaluate economic impact of	HS.E3.2 Evaluate how numerous factors and conditions influence	possibilities curve Economic threshold (marginal
11.1 Identify pests and signs of pest damage (i.e., parasites, rodents, weeds, insects, etc.) 11.2 Identify pest control methods used to manage pest damage (i.e., cultural, mechanical, biological, chemical, etc.) 11.3 Evaluate economic impact of pests on production 11.4 Discuss biosecurity measures utilized to protect the welfare of animals on a local, state, national,	HS.E3.2 Evaluate how numerous factors and conditions influence	possibilities curve Economic threshold (marginal
11.1 Identify pests and signs of pest damage (i.e., parasites, rodents, weeds, insects, etc.) 11.2 Identify pest control methods used to manage pest damage (i.e., cultural, mechanical, biological, chemical, etc.) 11.3 Evaluate economic impact of pests on production 11.4 Discuss biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level 11.5 Read and interpret pesticide	HS.E3.2 Evaluate how numerous factors and conditions influence	possibilities curve Economic threshold (marginal

AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 12.0 EXAMINE FOO	DD SAFETY AND PROCESSING F	PRACTICES
12.1 Investigate government agencies that impact agriculture and food production	HS.E3.3 Evaluate the role of government in regulating marketplaces. HS.E4.3 Explain the roles of institutions in a market economy.	Agencies investigated: FDA, EPA, USDA, APHIS, Homeland Security, CDC, FSIS, and OSHA
12.2 Analyze food product labels		
12.3 Evaluate food processing best practices (i.e., HACCP, quality assurance, food safety standards, etc.)		
12.4 Develop a plan to prevent foodborne illness in agricultural products		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 13.0 APPLY PRACT MAINTAINING STRUCTURES	FICES AND PROCEDURES FOR I	PLANNING, BUILDING, AND
13.1 Identify legal land descriptions		
13.2 Investigate techniques used to survey land		
13.3 Create sketches and plans for structures		
13.4 Determine structural requirements, specifications, and estimate costs for structures (i.e., bill of materials)		
13.5 Follow architectural and mechanical plans to construct, maintain, and/or repair agricultural structures (i.e., material selection,		
site preparation and/or layout, plumbing, concrete/masonry, electrical wiring, wood fabrication, etc.)		
13.6 Design animal, plant, and mechanical facilities including equipment		
13.7 Manage basic facility maintenance, installation, or repair		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 14.0 DEMONS	TRATE OPERATION OF TOO	DLS, EQUIPMENT, AND

Standards used in this Crosswalk: AZ Economics 2018 and CTE AgriScience 2018
Arizona Department of Education / Career and Technical E

INSTRUMENTS

		1
14.1 Demonstrate safe operating instructions and procedures as recommended by the manufacturer		
14.2 Utilize service manuals to perform preventative maintenance and determine scheduled service on tools, equipment, and instruments, including small engines		
14.3 Maintain hand tools and power equipment (i.e., hand saws, power saws, welders, leaf blowers, etc.)		
14.4 Demonstrate a variety of metal fabrication, welding, soldering, cutting, and finishing processes (i.e., SMAW, GMAW, GTAW, fuel-oxygen, plasma arc torch, etc.)		
14.5 Demonstrate a variety of wood fabrication and finishing processes		
14.6 Service electrical systems and components of mechanical equipment and power systems using a variety of troubleshooting and/or diagnostic methods		
14.7 Utilize manufacturers' guidelines to diagnose, troubleshoot, and repair machinery, equipment, and power source systems (i.e., hydraulic, pneumatic, transmission, steering, suspension, etc.)		
AgriScience Standards	Economics Standards	Reasoning/Rationale
STANDARD 15.0 DEMONSTRAT	TE AGRIBUSINESS MANAGEMEN	NT, FINANCE, AND
15.1 Define basic business terminology (i.e., entrepreneurship/placement, capital, budget, solvent, management, assets, liability, economics, etc.)	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E3.4 Explain the distinct types of business organizations and	Business terminology and types of business organizations Entrepreneurship vs. Placement Scarcity
	analyze the role of innovation and entrepreneurship in a market economy.	Factors of production and opportunity cost

15.2 Differentiate between macro- and micro-economics	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E3.1 Explain how buyers and sellers interact to create markets and market structures. HS.E4.2 Evaluate the economic conditions that lead to fiscal and monetary policy choices and explain their impact on households and businesses.	Macroeconomics vs. Microeconomics How supply and demand can determine prices Federal Reserve; fiscal and monetary policy
15.3 Identify financial records important to business management	HS.E1.2 Analyze the factors that influence how and why people make budgeting and saving choices. HS.E1.4 Compare the cost and benefits of several types of investments.	Budgeting strategies – 50/20/30 Rule Financial records, balance sheet, and inventory
15.4 Use management software and information technology [i.e., spreadsheets, databases, presentation software, record-keeping software, electronic record book, agriculture experience tracker (AET), etc.]	HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living.	Information technology, AET, and recordkeeping
15.5 Analyze business records and record-keeping procedures		
15.6 Identify tax structure of agricultural business (i.e., property tax, intangible taxes, income taxes, etc.)		
15.7 Apply the decision-making process for budgeting issues	HS.E1.1 Evaluate how and why people make choices to improve their economic well-being. HS.E1.2 Analyze the factors that influence how and why people make budgeting and saving choices. HS.E1.3 Evaluate the cost and benefits of using credit HS.E1.4 Compare the cost and benefits of several types of investments. HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies.	Scarcity, wants and needs, and diminishing rate of return AET record book – financial records Stocks, commodities, real estate, savings and checking accounts, money market, mutual funds, and retirement funds Supervised Agricultural Experience (SAE) Grant application and risk analysis

	HS.E3.2 Evaluate how numerous factors and conditions influence market prices.	
15.8 Identify methods of obtaining capital resources	HS.E1.3 Evaluate the cost and benefits of using credit HS.E1.4 Compare the cost and benefits of several types of investments.	Capital resources, grants, loans, and subsidies Loan fees and interest rates Credit score, applications, and 5 Cs of credit
15.9 Explain the purposes and structures of contracts, leases, deeds, and insurance policies	HS.E1.4 Compare the cost and benefits of several types of investments. HS.E1.5 Evaluate the ways insurance may minimize personal financial risk.	Liability and risk management Types of insurance (i.e., car, life, crop, personal injury, and liability)
15.10 Compare types of markets and influence factors (i.e., commodity markets, foreign markets, competition, etc.)	HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies. HS.E3.1 Explain how buyers and sellers interact to create markets and market structures.	Economic systems (i.e., command, mixed, and free market) Commodity and foreign markets Competition and economic philosophers/forecasts
15.11 Identify methods of managing risk	HS.E1.3 Evaluate the cost and benefits of using credit HS.E1.5 Evaluate the ways insurance may minimize personal financial risk.	Ways to manage risk include accepting, avoiding, transferring, mitigating, and exploiting risk
15.12 Describe the purpose and importance of marketing	HS.E2.2 Analyze how incentives influence economic choices for individuals, institutions, and societies.	Marketing and communications
15.13 Develop a marketing plan	HS.E2.2 Analyze how incentives influence economic choices for individuals, institutions, and societies.	Marketing plan with primary research
15.14 Create a business plan	HS.E1.3 Evaluate the cost and benefits of using credit HS.E2.2 Analyze how incentives influence economic choices for individuals, institutions, and societies. HS.E3.2 Evaluate how numerous factors and conditions influence market prices. HS.E3.4 Explain the distinct types of business organizations and analyze the role of innovation and entrepreneurship in a market economy.	Create a business plan [i.e., Agricultural Experience Tracker (AET) and SAE plan development (placement, entrepreneurship)] Profit vs. Loss – business records

AgriScience Standards	Economics Standards	Reasoning/Rationale		
STANDARD 16.0 EXAMINE TECHNOLOGY TOOLS AND SYSTEMS USED TO ACCESS, MANAGE, INTEGRATE, AND CREATE INFORMATION AND SOLVE PROBLEMS				
16.1 Use industry-relevant software and internet applications				
16.2 Use collaborative and virtual meeting software				
16.3 Analyze the benefits and limitations of emerging technology such as geospatial, online mapping systems, drones, and robotics				
16.4 Explain the benefits of computer-based and mobile application equipment				
16.5 Apply computer and other technologies to solve problems and increase efficiency [i.e., LabQuest, programmable logic controller (PLC), Geospatial Information System (GIS), Computer numeric control (CNC), Unmanned aircraft system (UAS), etc.]				