



AGRISCIENCE

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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 |
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| 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 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. | Advantages and disadvantages of imports and exports World Trade Organization |

Standards used in this Crosswalk: ADE CTE Economics revised in 2018 and AgriScience revised in 2018

| | <p>HS.E5.3 Explain why nations chose to trade and how it is regulated.</p> <p>HS.E5.4 Explain how national economies influence trade.</p> | Embargos/tariffs/trade barriers |
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| 1.5 Examine the benefit of earning foreign exchange through the export of agricultural products | <p>HS.E5.1 Evaluate the advantages and disadvantages of global trade.</p> <p>HS.E5.2 Evaluate how interdependence impacts individuals, institutions, and societies.</p> <p>HS.E5.3 Explain why nations chose to trade and how it is regulated.</p> <p>HS.E5.4 Explain how national economies influence trade.</p> | <p>Gross domestic product (GDP) of agricultural exports</p> <p>Advantages and disadvantages of imports and exports</p> <p>Import and export interdependence</p> <p>Foreign exchange rate/exchange rates; comparative and absolute advantage</p> <p>International trade organizations (i.e., Free trade and NAFTA)</p> <p>Tariffs and trade embargos</p> |
| 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 IMPACT OF TRENDS, TECHNOLOGIES, AND POLICIES ON AGRICULTURE | | |
| 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) | <p>HS.E3.4 Explain the distinct types of business organizations and analyze the role of innovation and entrepreneurship in a market economy.</p> <p>HS.E4.4 Explain the effect of advancements in technology and training on economic growth and standards of living.</p> | <p>Evolution of agriculture (i.e., advances in mechanization, quality seed, and selective breeding)</p> <p>Improved resource management and efficiency of production</p> |
| 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.) | <p>HS.E3.3 Evaluate the role of government in regulating marketplaces.</p> <p>HS.E4.2 Evaluate the economic conditions that lead to fiscal and monetary policy choices and explain their impact on households and businesses.</p> | <p>Role of government agencies in regulating agriculture</p> <p>Laws and economic changes</p> <p>Agricultural issues (i.e., animal welfare, water rights, private property rights, etc.)</p> |

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| | HS.E4.3 Explain the roles of institutions in a market economy. | 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 knowledgeable claims, with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses. | Urbanization; Rural vs. Urban (i.e., population density) Urbanization; Rural vs. Urban (i.e., 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 |
| AgriScience Standards | Economics Standards | Reasoning/Rationale |
| STANDARD 3.0 EXAMINE THE USE OF SCIENTIFIC PROCESSES 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 | Construct argument using evidence with agricultural issues Present agricultural issues (i.e., public speaking, presenting researched arguments to controversial topics, etc.) |

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| | <p>strengths and weaknesses of the explanation.</p> <p>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.</p> | |
| 3.4 Evaluate appropriate resources for research | <p>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</p> <p>HS.SP3.4 Evaluate the credibility of a source by examining how experts value the source</p> | 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 | <p>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.</p> <p>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.</p> | Experimental design |
| 3.8 Generate data tables, charts, and graphs based on collected data | <p>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.</p> <p>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.</p> | Experimental design |
| 3.9 Analyze data, communicate results, conclusions, and propose further investigations | <p>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</p> | Experimental design |

| | 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. | |
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| AgriScience Standards | Economics Standards | Reasoning/Rationale |
| STANDARD 4.0 EXAMINE THE RELATIONSHIP OF THE ENVIRONMENT TO AGRICULTURE PRODUCTION AND SUSTAINABILITY | | |
| 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, conventional agricultural production, etc.) | 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 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. | Pros and cons of organic, naturally raised and conventional production regarding efficiency, sustainability, and economic viability |
| 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 | | |

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| STANDARD 5.0 EXAMINE SOIL MANAGEMENT FOR PLANT AND 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 |
| STANDARD 7.0 ANALYZE PLANT 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) | | |

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| 7.4 Apply knowledge of plant physiology and energy conversion to plant systems (e.g., photosynthesis, respiration, and transpiration) | | |
| 7.5 Describe plant life cycle stages (i.e., germination, root growth, pollination, fruit development, etc.) | | |
| 7.6 Demonstrate plant germination, growth, and development | | |
| 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 MANAGEMENT | | |
| 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 | | |

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| STANDARD 9.0 ANALYZE ANIMAL 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) | | |
| AgriScience Standards | Economics Standards | Reasoning/Rationale |
| STANDARD 10.0 DEMONSTRATE CONCEPTS OF ANIMAL MANAGEMENT | | |
| 10.1 Recognize animal behaviors to facilitate safely working with animals | | |
| 10.2 Investigate the nature and properties of food, fiber, and by-products 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, ostrich, deer, etc.) | | |
| 10.5 Analyze the nutritional roles and needs of animals | | |
| 10.6 Analyze feed rations to meet the nutritional needs of animals | | |

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| 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 | | |
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| STANDARD 11.0 ANALYZE PRINCIPLES OF INTEGRATED PEST MANAGEMENT (IPM) IN PLANT AND ANIMAL SYSTEMS | | |
| 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 | HS.E3.2 Evaluate how numerous factors and conditions influence market prices. | Production loss and production possibilities curve Economic threshold (marginal utility) |
| 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 labels | | |
| 11.6 Investigate safe pesticide application practices | | |
| 11.7 Apply pesticides safely according to good manufacturing practices (GMPs) | | |

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| STANDARD 12.0 EXAMINE FOOD SAFETY AND PROCESSING 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 | | |
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| STANDARD 13.0 APPLY PRACTICES AND PROCEDURES FOR PLANNING, BUILDING, AND MAINTAINING STRUCTURES | | |
| 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 | | |
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| STANDARD 14.0 DEMONSTRATE OPERATION OF TOOLS, EQUIPMENT, AND INSTRUMENTS | | |
| 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 | | |
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| 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 DEMONSTRATE AGRIBUSINESS MANAGEMENT, FINANCE, AND MARKETING SKILLS | | |
| 15.1 Define basic business terminology (i.e., entrepreneurship/placement, capital, budget, solvent, management, assets, liability, economics, etc.) | <p>HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies.</p> <p>HS.E3.4 Explain the distinct types of business organizations and analyze the role of innovation and entrepreneurship in a market economy.</p> | <p>Business terminology and types of business organizations</p> <p>Entrepreneurship vs. Placement Scarcity</p> <p>Factors of production and opportunity cost</p> |
| 15.2 Differentiate between macro- and micro-economics | <p>HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies.</p> <p>HS.E3.1 Explain how buyers and sellers interact to create markets and market structures.</p> <p>HS.E4.2 Evaluate the economic conditions that lead to fiscal and monetary policy choices and explain their impact on households and businesses.</p> | <p>Macroeconomics vs. Microeconomics</p> <p>How supply and demand can determine prices</p> <p>Federal Reserve; fiscal and monetary policy</p> |
| 15.3 Identify financial records important to business management | <p>HS.E1.2 Analyze the factors that influence how and why people make budgeting and saving choices.</p> <p>HS.E1.4 Compare the cost and benefits of several types of investments.</p> | <p>Budgeting strategies – 50/20/30 Rule</p> <p>Financial records, balance sheet, and inventory</p> |

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| 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 | <p>HS.E1.1 Evaluate how and why people make choices to improve their economic well-being.</p> <p>HS.E1.2 Analyze the factors that influence how and why people make budgeting and saving choices.</p> <p>HS.E1.3 Evaluate the cost and benefits of using credit</p> <p>HS.E1.4 Compare the cost and benefits of several types of investments.</p> <p>HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies.</p> <p>HS.E3.2 Evaluate how numerous factors and conditions influence market prices.</p> | <p>Scarcity, wants and needs, and diminishing rate of return</p> <p>AET record book – financial records</p> <p>Stocks, commodities, real estate, savings and checking accounts, money market, mutual funds, and retirement funds</p> <p>Supervised Agricultural Experience (SAE) Grant application and risk analysis</p> |
| 15.8 Identify methods of obtaining capital resources | <p>HS.E1.3 Evaluate the cost and benefits of using credit</p> <p>HS.E1.4 Compare the cost and benefits of several types of investments.</p> | <p>Capital resources, grants, loans and subsidies</p> <p>Loan fees and interest rates</p> <p>Credit score, applications, and 5 Cs of credit</p> |
| 15.9 Explain the purposes and structures of contracts, leases, deeds, and insurance policies | <p>HS.E1.4 Compare the cost and benefits of several types of investments.</p> <p>HS.E1.5 Evaluate the ways insurance may minimize personal financial risk.</p> | <p>Liability and risk management</p> <p>Types of insurance (i.e., car, life, crop, personal injury, and liability)</p> |
| 15.10 Compare types of markets and influence factors (i.e., commodity markets, foreign markets, competition, etc.) | <p>HS.E2.1 Explain how scarcity results in economic decisions and evaluate their impact on individuals, institutions, and societies.</p> <p>HS.E3.1 Explain how buyers and sellers interact to create markets and market structures.</p> | <p>Economic systems (i.e., command, mixed, and free market)</p> <p>Commodity and foreign markets</p> <p>Competition and economic philosophers/forecasts</p> |
| 15.11 Identify methods of managing risk | <p>HS.E1.3 Evaluate the cost and benefits of using credit</p> <p>HS.E1.5 Evaluate the ways insurance may minimize personal financial risk.</p> | <p>Ways to manage risk including accept, avoid, transfer, mitigate, and exploit risk</p> |
| 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 |

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| 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 business plan [i.e., Agricultural Experience Tracker (AET) and SAE plan development (placement, entrepreneurship)] Profit vs. Loss – business records |

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| STANDARD 16.0 EXAMINE TECHNOLOGY TOOLS AND SYSTEMS USED TO ACCESS, MANAGE, INTEGRATE, AND CREATE INFORMATION AND SOLVE PROBLEMS |
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| 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.] | | |