

# Standards Correlations

## Operating the Farm Business (8014)

Task	SOL Correlations
<b>Demonstrating Personal Qualities and Abilities</b>	
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1

<b>Task</b>	<b>SOL Correlations</b>
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1
<b>Demonstrating Interpersonal Skills</b>	
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1

Task	SOL Correlations
	History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
<b>Demonstrating Professional Competencies</b>	
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8

Task	SOL Correlations
	<p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1</p>
<p>Demonstrate an understanding of information security.</p>	<p>English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>Mathematics: COM.10</p>
<p>Maintain working knowledge of current information-technology (IT) systems.</p>	<p>English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9</p> <p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17</p> <p>Science: BIO.1, CH.1, ES.1, PH.1</p>
<p>Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.</p>	<p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16</p> <p>Science: CH.1, ES.1, LS.1, PH.1, PS.1</p>
<p>Apply mathematical skills to job-specific tasks.</p>	<p>English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6</p> <p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14,</p>

Task	SOL Correlations
	8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1
<b>Examining All Aspects of an Industry</b>	
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16
Examine aspects of management within an industry/organization.	
Examine aspects of financial responsibility within an industry/organization.	
Examine technical and production skills required of workers within an industry/organization.	
Examine principles of technology that underlie an industry/organization.	

<b>Task</b>	<b>SOL Correlations</b>
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16
<b>Addressing Elements of Student Life</b>	
Identify the purposes and goals of the student organization.	
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.	
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.	
Identify Internet safety issues and procedures for complying with acceptable use standards.	
<b>Exploring Work-Based Learning</b>	
Identify the types of work-based learning (WBL) opportunities.	
Reflect on lessons learned during the WBL experience.	
Explore career opportunities related to the WBL experience.	
Participate in a WBL experience, when appropriate.	
<b>Exploring Leadership Opportunities through FFA</b>	

<b>Task</b>	<b>SOL Correlations</b>
Identify the role of supervised agricultural experiences (SAEs) in agricultural education.	English: 9.3, 9.5, 10.3, 10.5
Participate in an SAE.	English: 9.5, 9.8, 10.5, 10.8
Identify the benefits and responsibilities of FFA membership.	English: 9.5, 9.6, 9.7, 9.8, 10.5, 10.6, 10.7, 10.8
Describe leadership characteristics and opportunities as they relate to agriculture and FFA.	English: 9.5, 10.5  History and Social Science: VUS.8, VUS.9, VUS.10, VUS.11, WHII.8, WHII.10, WHII.11
Apply for an FFA degree and/or an agricultural proficiency award.	English: 9.5, 10.5
<b>Applying Economic Principles Specific to Agricultural Production</b>	
Apply supply and demand analysis to a product, commodity, or service for an agriculture, food, and natural resources (AFNR) business.	English: 12.5  History and Social Science: GOVT.14, GOVT.15
Explain opportunity cost in production agriculture.	English: 12.3, 12.5  History and Social Science: GOVT.14, GOVT.15
Explain the relationships between inputs and outputs.	English: 12.3, 12.5  History and Social Science: GOVT.14, GOVT.15
<b>Operating an Agricultural Business</b>	
Identify ethical standards and best management practices (BMP) for an agricultural business.	English: 12.3, 12.5
Identify the procedures, licenses, permits, regulations, and laws related to starting a business.	English: 12.5  History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15

<b>Task</b>	<b>SOL Correlations</b>
Develop a business plan for an agricultural production enterprise.	English: 12.5 History and Social Science: GOVT.14, GOVT.15
Evaluate how to recruit, train, and retain employees.	English: 12.5
Discuss an expansion plan.	English: 12.1, 12.5
Describe the need for estate planning.	English: 12.5
Identify the elements required to form a legally binding contract for services.	English: 12.5
Develop a risk-management plan for an agricultural production enterprise.	English: 12.5
Identify the components of a farm rent/lease agreement.	English: 12.5 History and Social Science: GOVT.14, GOVT.15
<b>Using Plant and Environmental Science in Agricultural Production</b>	
Develop a sample nutrient management plan (NMP).	English: 12.3, 12.5
Determine the inputs needed to grow a crop.	English: 12.5 Mathematics: AFDA.4, AFDA.5
Describe how an AFNR business can minimize waste, maximize efficiency, and increase profits.	English: 12.5
Develop a crop rotation plan.	English: 12.5
Analyze the use of conservation tillage practices and erosion control systems.	English: 12.5
Interpret various agencies' soil conservation program requirements.	English: 12.5 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15

<b>Task</b>	<b>SOL Correlations</b>
Explain the importance of the U.S. Food and Drug Administration's (FDA) Food Safety Modernization Act (FSMA).	English: 12.5, 12.8 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15
Explain Good Agricultural Practices (GAP) and Good Handling Practices (GHP).	English: 12.5, 12.8
<b>Producing Livestock</b>	
Describe veterinary practices performed by a livestock owner/manager.	English: 12.5
Develop a healthcare plan for a livestock production enterprise.	English: 12.5
Develop a biosecurity plan.	English: 12.5
Describe livestock waste management systems.	English: 12.5
<b>Managing Natural Resources</b>	
Develop a conservation plan.	English: 12.5
Identify elements for maintenance of a wildlife habitat.	English: 12.5 Science: BIO.8
Develop plans for a hunting/fishing enterprise.	English: 12.5
Explain multiple functions of farm ponds.	English: 12.5
<b>Managing a Forest Enterprise</b>	
Identify agroforestry management practices to create environmental, economic, and social benefits.	English: 12.5
Identify silviculture practices for forest crop improvement.	English: 12.5
Identify planting and harvesting techniques.	English: 12.5

<b>Task</b>	<b>SOL Correlations</b>
Identify regeneration methods necessary for the continuous growth of trees.	English: 12.3, 12.5
Design plans to establish forest roads.	English: 12.1, 12.8
Identify conditions needed to harvest trees for optimal profit.	English: 12.3, 12.5
Develop a forest fire prevention plan.	English: 12.5, 12.8
<b>Understanding Pesticide Use and Safety</b>	
Describe use of pesticides.	English: 12.5, 12.8
Identify technologies used in pesticide application.	English: 12.5 History and Social Science: GOVT.12, VUS.14, WG.17, WHII.14
Obtain pesticide applicator certification.	English: 12.5, 12.8 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15
Calibrate a sprayer.	English: 12.5 Mathematics: AII.3
<b>Practicing Safety in Agricultural Production Enterprises</b>	
Identify marked safety areas.	English: 12.5
Identify the location and use of eye wash stations.	English: 12.5 Science: CH.1
Identify the location of the posted evacuation routes.	English: 12.5
Demonstrate knowledge of safety data sheets (SDS).	English: 12.5 Science: CH.1

<b>Task</b>	<b>SOL Correlations</b>
Demonstrate the use of chemicals.	English: 12.5
Demonstrate the use of standard and metric hand tools.	English: 12.5
Demonstrate the use of power tools.	English: 12.5
Demonstrate the use of precision standard and metric measuring tools.	English: 12.5
Demonstrate the use of protective clothing and equipment.	English: 12.5
Demonstrate the use of fire protection equipment.	English: 12.5
Demonstrate the use of equipment.	
Demonstrate safety in the agricultural mechanics lab/workshop.	English: 12.5, 12.6, 12.7, 12.8 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15
Identify general safety procedures for the operation of farm equipment.	English: 12.5, 12.6, 12.7
<b>Using Mechanics in Agriculture</b>	
Select farm machinery and equipment.	
Identify farm structures and uses.	English: 12.8
Identify steps in constructing a farm building.	English: 12.1, 12.5 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15
Construct a farm building using carpentry tools and equipment.	
Use metal fabrication tools and/or equipment.	English: 12.5
<b>Diversifying Agricultural Enterprises</b>	

<b>Task</b>	<b>SOL Correlations</b>
Research agricultural diversification practices that generate additional sources of farm income.	English: 12.3, 12.5, 12.8
Research marketing opportunities.	English: 12.8
Examine alternative or niche market opportunities.	English: 12.3, 12.5, 12.8
Develop a plan for an agritourism operation.	English: 12.5
Identify AFNR business structures.	English: 12.3, 12.5, 12.8
Explain agricultural literacy and its relationship to public perceptions.	English: 12.5 History and Social Science: GOVT.12, VUS.14, WG.17, WHII.14
<b>Developing and Analyzing Agricultural Production Records</b>	
Develop financial, marketing, and risk management plans for the farm business.	English: 12.5 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15
Develop an enterprise budget for an agricultural production business.	English: 12.5 Mathematics: AII.3
Examine strategies for tracking, reporting, and managing inventory.	English: 12.5 Mathematics: COM.1, COM.4, COM.7, COM.9, COM.10, COM.11
Reconcile a bank statement.	English: 12.5
Analyze a paystub.	English: 12.3, 12.5 History and Social Science: GOVT.14, GOVT.15
Complete a sample state and federal income tax form.	English: 12.3, 12.5, 12.6, 12.7 History and Social Science: GOVT.7, GOVT.8, GOVT.14, GOVT.15

<b>Task</b>	<b>SOL Correlations</b>
Construct a complete income statement using cost and accrual basis.	English: 12.3, 12.5 History and Social Science: GOVT.14, GOVT.15
Identify the difference between real depreciation and income tax depreciation.	English: 12.5
Calculate the financial health of a farm business.	English: 12.2, 12.5
<b>Exploring Technology Used in AFNR Enterprises</b>	
Research monitoring and sensing technologies used in agricultural enterprises.	English: 12.8
Identify apps used in agricultural businesses.	English: 12.2, 12.5
Explore careers related to agricultural technology.	English: 12.5, 12.8