

## Expectations and Outcomes

Grade Level/Course:9-12

Content Area: Agriculture

Unit Title	Guarantees
Week 1	<ul style="list-style-type: none"> <li>• Demonstrate classroom and course expectations</li> <li>• Devise and compile records on a Supervised Agricultural Experience program (SAE)</li> <li>• Describe opportunities in the FFA</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• List factors to consider when selecting a garden sight</li> <li>• Draw, to scale, a garden plan</li> <li>• Define precision farming</li> <li>• Recognize tools for precision farming</li> <li>• Explain the potential benefits of precision farming</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Identify types of tillage operations and systems</li> <li>• Compare the effects of tillage systems on seed germination</li> <li>• Demonstrate proper garden tillage</li> <li>• Assess the effects of soil temperature on seed germination</li> <li>• Describe and determine bulk density of soil</li> <li>• Explain how to alter bulk density of soil</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Demonstrate proper seeding technique</li> <li>• Demonstrate proper transplanting technique</li> <li>• Demonstrate proper soil sampling technique</li> <li>• Devise a nutrient management plan for a field</li> <li>• Interpret a soil test report</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Explain the cation exchange capacity of soils</li> <li>• Describe the function of nitrogen, phosphorus, potassium, and micronutrients in plant growth</li> <li>• Describe the importance of a soil's pH</li> <li>• Demonstrate plant tissue analysis</li> </ul>

<b>Unit Title</b>	<b>Guarantees</b>
Week 6	<ul style="list-style-type: none"> <li>• Describe the process of nitrogen fixation</li> <li>• Interpret a fertilizer analysis</li> <li>• Identify fertilizer sources and forms</li> <li>• Recommend methods of fertilizer application for different situations</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>• Diagnose a plant problem</li> <li>• Explain the concept of integrated pest management</li> <li>• Identify methods to control pests</li> <li>• Identify the three main routes by which pesticides enter the body</li> <li>• Interpret a pesticide label</li> <li>• Interpret a Material Data Safety Sheet</li> <li>• Select appropriate personal protective equipment for a given situation</li> </ul>
Week 8	<ul style="list-style-type: none"> <li>• Outline a pest control program for a pest</li> <li>• Identify common insect, disease, and weed pests</li> <li>• Describe the ways insects are killed by insecticides</li> <li>• Describe the ways a herbicide kills a weed</li> <li>• Outline how a sprayer is calibrated</li> <li>• Design and conduct an experiment to investigate a question regarding plants</li> </ul>
Week 9	<ul style="list-style-type: none"> <li>• Design and conduct an experiment to investigate a question regarding plants Present a summary of the plant investigation results</li> </ul>