



## JC Schools Food Science Yearly Standards

### Overarching Standards

#### **9-12.FS.LO.01**

Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

#### **9-12.FS.LO.02**

Demonstrate employability skills required by business and industry

#### **11-12.RI.1.B**

Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and content-specific meanings using context, affixes, or reference materials.

#### **11-12.W.1.A**

~~Conduct research to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; gather multiple relevant, credible sources, print and digital; integrate information using a standard citation system.~~  
Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

#### **9-12.FS.LO.03**

Learn to work safely in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develop plans for a supervised agricultural experience program (SAEP).

Units	Priority Standards	Supporting Standards
Unit 1  Introduction to Food Science	<b>CRP.07</b> Employ valid and reliable research strategies.  <b>CS.03</b>	

	<p>Examine and Summarize the importance of health, safety and environmental management system in AFNR workplaces</p> <p><b>FPP.02</b> Apply principles nutrition, biology, microbiology, chemistry, and human behavior to the development of food products.</p> <p><b>FPP.04</b> Explain the scope of the food industry and the historical and current developments of food product and processing.</p>	
<p><b>Unit 2</b></p> <p><b>Chemistry of Food</b></p>	<p><b>CRP.02</b> Apply appropriate academic and technical skills</p> <p><b>CRP.04</b> Communicate clearly, effectively and with reason.</p> <p><b>CRP.07</b> Employ valid and reliable research strategies.</p> <p><b>CRP.12</b> Work productively in teams while using cultural/global competence.</p> <p><b>CS.03</b> Examine and summarize the importance of health, safety and environmental management systems in AFNR workplaces</p> <p><b>FPP.02</b> Apply principles of nutrition, biology, microbiology, chemistry and human behavior to the development of food products.</p> <p><b>FPP.04</b> Explain the scope of the food industry and the historical and current developments of food product and processing.</p>	

<p><b>Unit 3</b></p> <p><b>Food Processing &amp; Preservation</b></p>	<p><b>CRP.02</b> Apply appropriate academic and technical skills.</p> <p><b>CRP.06</b> Demonstrate creativity and innovation.</p> <p><b>CRP.07</b> Employ valid and reliable research strategies.</p> <p><b>CRP.08</b> Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p><b>CRP.11</b> Use technology to enhance productivity.</p> <p><b>CS.01</b> Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food &amp; Natural Resources Career Cluster.</p> <p><b>CS.03</b> Examine and summarize the importance of health, safety and environmental management systems in AFNR workplaces</p> <p><b>FPP.01</b> Develop and implement procedures to ensure safety, sanitation and quality in food product and processing facilities</p> <p><b>FPP.02</b> Apply principles of nutrition, biology, microbiology, chemistry and human behavior to the development of food products.</p> <p><b>FPP.03</b> Select and process food products for storage, distribution and consumption</p>	
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	<p><b>FPP.04</b> Explain the scope of the food industry and the historical and current developments of food product and processing.</p>	
<p><b>Unit 4</b></p> <p><b>Food Health and Safety</b></p>	<p><b>CRP.02</b> Apply appropriate academic and technical skills.</p> <p><b>CRP.04</b> Communicate clearly, effectively and with reason.</p> <p><b>CRP.05</b> Consider the environmental, social and economic impacts of decisions.</p> <p><b>CRP.06</b> Demonstrate creativity and innovation.</p> <p><b>CRP.08</b> Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p><b>CRP.12</b> Work productively in teams while using cultural/global competence.</p> <p><b>CS.01</b> Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food &amp; Natural Resources Career Cluster</p> <p><b>CS.03</b> Examine and summarize the importance of health, safety and environmental management systems in AFNR workplaces.</p> <p><b>FPP.01</b></p>	

	<p>Develop and implement procedures to ensure safety, sanitation and quality in food product and processing facilities.</p> <p><b>FPP.02</b> Apply principles of nutrition, biology, microbiology, chemistry and human behavior to the development of food Products.</p> <p><b>FPP.04</b> Explain the scope of the food industry and the historical and current developments of food product and processing.</p>	
<p><b>Unit 5</b></p> <p><b>Preference and Product Availability and The Safety of Our Food</b></p>	<p><b>BS.02</b> Demonstrate proficiency by safely applying appropriate laboratory skills to complete tasks in a biotechnology research and development environment (e.g., standard operating procedures, record keeping, aseptic technique, equipment maintenance, etc.)</p> <p><b>BS.03</b> Demonstrate the application of biotechnology to solve problems in AFNR systems (e.g., bioengineering, food processing, waste management, horticulture, forestry, livestock, crops, etc.).</p> <p><b>CRP.02</b> Apply appropriate academic and technical skills.</p> <p><b>CRP.04</b> Communicate clearly, effectively and with reason.</p> <p><b>CRP.06</b> Demonstrate creativity and innovation.</p> <p><b>CRP.07</b> Employ valid and reliable research strategies.</p> <p><b>CRP.12</b> Work productively in teams while using cultural/global competence.</p>	

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