

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT



Farm to Fork with STEAM - Semester

Board Approval Date: 6/20/24	Course Length: 1 Semester
Grading: A-F	Credits: N/A
Proposed Grade Level(s): 6, 7, 8	Subject Area: Elective Elective Area (if applicable): Exploratory STEM
Prerequisite(s): None	Corequisite(s): None
CTE Sector/Pathway:	
Intent to Pursue ‘A-G’ College Prep Status: No	
A-G Course Identifier:	
Graduation Requirement: No	
Course Intent: Program (if applicable):	
<p>The Folsom Cordova Unified School District prohibits discrimination, intimidation, harassment (including sexual harassment) or bullying based on a person’s actual or perceived ancestry, color, disability, race or ethnicity, religion, gender, gender identity or gender expression, immigration status, national origin, sex, sexual orientation, or association with a person or group with one or more of these actual or perceived characteristics. For concerns/questions or complaints, contact the Title IX Coordinator(s), Equity Compliance Officer(s) and Section 504 Coordinator(s) :</p> <p>Donald Ogden, Associate Superintendent – Human Resources, Title IX Coordinator (Employees) & Equity Compliance Officer dogden@fcusd.org 916-294-9000 Ext 104410</p> <p>Jim Huber Ed. D., Assistant Superintendent – Educational Services, Title IX Coordinator (Students), Section 504 Coordinator & Equity Compliance Officer jhuber@fcusd.org 916-294-9000 Ext 104625</p>	

COURSE DESCRIPTION:

The course provides a foundation of knowledge of the intersection of biological sciences, environmental sciences, nutrition, agriscience, chemistry, engineering, mathematical concepts and artistic principles into the complex system that is our food supply.

Students will engage in hands-on lessons that demonstrate the link between how food is produced and prepared. Learning foundational skills like seasonal produce, growing produce, harvesting food, nutritional values, food groups will only aid in their performance in one of these career sectors.

DETAILED UNITS OF INSTRUCTION:

Unit Number/Title	Unit Essential Questions	Examples of Formative Assessments	Examples of Summative Assessment
1. Introduction the Garden	What are the necessary factors of growing crops? What are the tools used in the garden? How are seeds started? What are the components of nutrient rich soils? What are good garden organisms and what are less desirable garden organisms?	*Preparing garden beds, running irrigation lines, checking fences, setting pest management systems, evaluating ripeness, evaluating plant health, review of safety in a garden, charts of tools and their uses	*Plant a garden bed *Harvest a crop
2. Introduction to FFA and FCCLA	What is a Career Technical Student Organization? What do FFA and FCCLA mean? What opportunities does each program provide? What is expected of students involved in these programs? What careers do these programs support?	*Graphic organizers *Group projects *Organization presentations	*Posters of the program offerings
3. Introduction to Nutrition	Why does a body need varied nutrient sources? Where do different nutrients come from? What do we get from food? Where do food items get their nutrients? What does a healthy diet consist of? What can we eat to ensure a	*My plate activities *CFAITC Lessons *Hydroponic system	*Recipe card with nutritional facts

	<p>healthy balanced diet? What do we need to grow healthy crops?</p>		
4. Crop Identification	<p>What are the different commodity food crops grown in CA? What are different crops found in other parts of the world? What part of the plant do we eat? What characteristics of a plant do we evaluate to determine how to use it? How do you determine ripeness?</p>	<p>*Tasting different foods, using plant parts in recipes</p>	<p>*Crop identification chart</p>
5. The Science of Cooking	<p>How are microbes used in cooking? What principles of chemistry are used in baking and cooking? How are chemical reactions to change flavors of different foods?</p>	<p>*Fermentation project (refrigerator pickles) *Baking with yeast *Baking with leavening agents *Baking vs pan cooking</p>	<p>*Prepare food item using a method discussed</p>
6. Animal Agriculture	<p>What foods come from animals? How does animal husbandry affect food supply? How does animal health affect our food supply? What do we look for in quality meat? How is meat processed in the US?</p>	<p>*Animal husbandry *Animal care *Hatching eggs *Preparing meat *Food safety in preparing meats and making butter</p>	<p>*Group project using an animal product</p>
7. Ornamental Horticulture	<p>What non-food crops do we grow? What non-food crops do we use every day? How are the nonfood crops used? How do we use ornamental flowers? What is the anatomy of a flower?</p>	<p>*Harvesting fiber from crops *Synthetic vs. natural fibers, *Creating floral arrangements and flower dissection</p>	<p>*Create a floral arrangement</p>

ESSENTIAL STANDARDS:

MS-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.

MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

MS-LS1-3. Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

MS-LS1-4. Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants, respectively.

MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms

MS-LS1-7. Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.

MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. [

MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.*

MS-ESS2-4. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-ETS1-4. Develop a model to generate data for iterative

RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

Link to Common Core Standards (if applicable):

Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.

<https://www.nextgenscience.org/sites/default/files/AllDCI.pdf>

Link to Framework (if applicable):

Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

Link to Subject Area Content Standards (if applicable):

Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.

Link to Program Content Area Standards (if applicable):

Program Content Area Standards apply to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

<https://www.cde.ca.gov/ci/ct/sf/documents/agnatural.pdf>

<https://www.cde.ca.gov/ci/ct/sf/documents/hosptourec.pdf>

TEXTBOOKS AND RESOURCE MATERIALS:

Textbooks

Board Approved	Pilot Completion Date (If applicable)	Textbook Title	Author(s)	Publisher	Edition	Date
<i>Yes</i>		<i>Guide to Good Food</i>	Largen/Bence	G-W	14th	<i>1/1/2018</i>