

## Clovis Unified Agriculture Program & Facility

Clovis Unified has one of the top Agriculture Education programs in the State of California, along with the best high school agriculture facility. The McFarlane-Coffman Agriculture Center was established in August of 2000 to serve students from throughout Clovis Unified School District. Currently, the twenty-two acre facility consists of two traditional classrooms, two science laboratory classrooms, three engineering classrooms, and a biotechnology facility. The Farm Laboratory includes animal units for beef, sheep, swine, goats and rabbits. Four acres of irrigated pasture houses cattle, sheep, and horse projects.



### Clovis East High School

2940 Leonard  
Clovis, CA 96619  
559-327-4000

#### Clovis FFA Webpage

<http://www.Clovis-FFA.com>

#### Clovis East Agriculture Staff

Animal Science Teacher & Department Chair	<b>Jennifer Knight</b> jenniferknight@cusd.com
Agriculture Science & Plant Science Teacher	<b>Steve Gambriil</b> stevegambriil@cusd.com
Agriculture Science & Floral Design Teacher	<b>Aireal Covey</b> airealcovey@cusd.com
Agriculture Science Teacher & Floral Design Teacher	<b>Kaylee Santos</b> kayleesantos@cusd.com
Agriculture Science Teacher	<b>David Valdez</b> davidvaldez@cusd.com
Agriculture Science Teacher	<b>Emily Faraone</b> emilyfaraone@cusd.com
Agriculture Mechanics & Engineering Teacher	<b>Gregory Ravy</b> gregoryravy@cusd.com
Agriculture Department Learning Director	<b>Matt Papendorf</b> mattpapendorf@cusd.com
Career Technical Education Counselor	<b>Kim Hamilton</b> kimhamilton@cusd.com

# Agriculture Science CTE Pathway



### Clovis East High School

#### Agriculture Department

The agriculture science pathway is part of the Agriculture Department at Clovis East High School. All CUSD high school students are welcome to enroll in our Agriculture Department courses.

Agriculture Education is a Comprehensive Program offering student's classroom laboratory experience, leadership development through involvement in the National FFA Organization, and experiential learning through Supervised Agriculture Education projects.

## 2021-2022

## Why Agriculture Science Important?

Approximately 70 % of people directly rely on agriculture as a mean of living. Agriculture employs over 24 million people in the United States.

Agriculture is the most effective industry in reducing poverty and hunger. The world is counting on agriculture to produce more nutritious food on less land.

Through technological advancements, Farmers can feed over 155 people for a year off of one acre of land.

The world population grows by approximately 200,000 people per day. Agriculture scientist hold the key to feeding, clothing, housing, and medicating an increasingly growing world population.

Through the use of biotechnology, agriculture scientists could be the vector that discovers the cure to many of the world's most deadly diseases.

Agriculturists in the U.S. keep our family and friends healthy by producing some of the safest and most nutritious produce, dairy, and meat products in the world.

## Careers in Agriculture Science



Bioresource Engineer	Wildlife Biologist	Retail Sales Person
Ecologist	Farmer/Rancher	International Agriculture Relations
Environmental Scientist	Pest Control Advisor	Agriculture Communications
Geneticist	Agriculture Science Teacher	Education Outreach Specialist
Plant Scientist	Sales Representative	Plant Breeder
Animal Scientist	Laboratory Researcher	Crop Consultant
Soil Scientist	Environmental & Water Lawyer	Public Health Scientist
Rangeland Scientist	Water Analysis Specialist	AND MANY MORE!

## Agriculture Science CTE Courses

### Biology & Sustainable Agriculture (P)

**Grade:** 9, 10

**Duration:** Year Course

**Prerequisite:** Enrollment in English 1

Sustainable Agriculture is a one year course designed to integrate biological science practices and knowledge into the practice of sustainable agriculture. The course is organized into four major sections, or units, each with a guiding question. Unit one addresses the question, What is sustainable agriculture? Unit two, sustainable agriculture fit into our environment? Unit three, What molecular biology principles guide sustainable agriculture? Unit four, How do we make decisions to maximize sustainable agricultural practices within a functioning ecosystem? Within each unit specific life science principles will be identified with agricultural principles and practices guiding the acquisition of this knowledge, culminating in the development of a sustainable farm model and portfolio of supporting student research.

### Chemistry and Agri-science (P)

**Grades:** 10,11,12

**Duration:** Year Course

**Prerequisite:** Biology AB (P) or Sustainable Agriculture Biology (P)

This course explores the physical and chemical nature of soil as well as the relationships between soil, plants, animals and agricultural practices. Students will examine properties of soil and land and their connections to plant and animal production. Using knowledge of scientific protocols as well as course content, students will develop an Agriscience research program to be conducted throughout the first semester of the course.

### Adv. Interdisciplinary Science for Sustainable Agriculture (P) (Honors)

**Grades:** 11,12

**Duration:** Year Course

**Prerequisite:** Agriculture Chemistry and Soil

This integrated class combines an interdisciplinary approach to laboratory science and research with agricultural management principles. Using skills and principles learned in the course, students design systems and experiments to solve agricultural management issues currently facing the industry. Additionally, students will connect the products created in this class with industry activities to link real world encounters and implement skills demanded by both colleges and careers.

Grade	Introductory Course	Concentrator Course	Capstone Course
9 <sup>th</sup>	Agriculture Science 1 or Biology & Sustainable Agriculture or Agriculture Earth Science		
10 <sup>th</sup>		Chemistry and Agri-Science	
11 <sup>th</sup>		AP Environmental Science	
12 <sup>th</sup>			Adv. Interdisciplinary Science for Sustainable Agriculture or Food Science

## Agriculture Related Enrichment Activities

The Clovis East Agriculture Program offers many opportunities for students to enrich their Agriculture Science Experience.

- FFA Competitive Teams in Natural resources, Agriculture Sales and Farm Records
- Competitive speaking events in the areas of Prepared Speaking, Extemporaneous Speaking, Impromptu, and Job interview
- Supervised Agriculture Experience Projects which include plant, animal, soil, or mechanical science experiments
- Farm Laboratory, 21 acres accessible for all students to complete academically related experiments or trials.
- Class Field Trips, Lab Activities, and Guest Speakers also enhance the learning experience.

