



SECTOR SPOTLIGHT: AGRICULTURE & NATURAL RESOURCES

FEBRUARY 2024

VOL.3, NO.6

STUDENT QUESTIONS & ANSWERS

Why did you pick this pathway?

I chose this pathway because I saw an opportunity to fulfill my science requirements in a unique way. During my freshman year, I took the Ag Bio class and decided that this program was filled with more opportunities than I had expected from an outsiders' point of view. I knew that this pathway was one where I could make a change not only within the program, but in my school and community. I engaged in various extracurriculars in the program, including leadership roles, public speaking contests, career events, and practical learning through livestock care and a greenhouse internship.

Favorite thing you learned in your pathway?

A favorite aspect of my learning was the improvement of my leadership abilities. As FFA President, I have led chapter meetings, officer meetings, and a variety of group discussions. I have learned how to use people's strengths in a group setting to have a better overall outcome for the team. I know that what I have learned within the Ag pathway I can apply to future and professional endeavors.

Briefly describe your participation in experiences and activities related to your pathway.

I've been in FFA for three years, about to complete the Ag Science and Plant pathway. As Reporter and President, I've served as an officer for two years and participated in public speaking events like the Opening/Closing Ceremonies, Creed, and Impromptu contests. Each year, I've attended leadership conferences, including the annual State Leadership conferences, meeting peers from across California. I've raised hogs for the Tulare County Fair for two years and was part of the 2023 State Champion Nursery/Landscape CDE Team, placing 6th nationally in Indianapolis. As a Greenhouse Intern, I manage the Annual Plant Sale and lead a student team for the Ag Department and Greenhouse. The Ag pathway has allowed me to expand my horizons in opportunities and experiences that I did not know were available to me otherwise.

Favorite memory of being a part of the pathway.

A highlight of my time in this pathway has been the travel, from the Tulare County Fair and leadership conferences to statewide contests. I always have the best time with amazing people that share similar interests to myself. One specific memory experience was the National FFA Finals for Nursery/Landscape in Indianapolis, Indiana. There, I met new people, explored diverse cultures and cuisines, and celebrated our state victory, making it a lasting memory from my FFA journey.

Advice to students interested in your pathway.

Advice that I would give students interested in the Ag Pathway is to speak to their counselor! In order for a student to be in the FFA program, they need to be enrolled into an Ag class. The Ag Department has a variety of different options and opportunities available to students depending on their interests. If you want to join a competitive team, travel the state, compete in public speaking, or gain leadership skills, join an ag class today!

Do your future goals include what you learned in your pathway?

Last year, I had the honor of serving as the Dinuba FFA Reporter. As Reporter, I developed skills in digital design, marketing, targeting the proper audience, and using a variety of platforms to promote events within the program. I also participated in an Ag Marketing Internship with Ag Source Magazine, where I collaborated with local agriculture businesses to develop marketing strategies and create advertisements. These experiences allowed me to make a confident decision in which career I wanted to pursue within the agriculture industry.

Plans after high school:

After high school, I plan to attend Reedley College and then transfer to Cal Poly SLO, where I plan to major in Ag Communications. The Ag Communications program at Cal Poly combines the study of communications, public relations, marketing, and journalism with the study of Ag and Environmental Sciences. An Ag Communications career would include reporting agricultural information to audiences such as consumers, legislators, homeowners, farmers, agribusiness, commodity groups, and governmental agencies. My time in the Ag Pathway has prepared me to take the next step in my educational journey and pursue a career that I am passionate about.



ELIZABETH QUINTERO-RUBIO
SENIOR

PATHWAYS AT A GLANCE

The Agriculture and Natural Resources sector offers students distinct areas of experience in the agriculture industry. Dinuba High School offers five pathways within the sector. Although these pathways are interconnected, each one emphasizes different skill areas.

The **Agriscience** pathway provides students with foundational knowledge in Agricultural Biology, a laboratory science emphasizing detailed biological principles in areas such as molecular and cellular aspects of living organisms, structure and function of agricultural plants and animals, genetics, physiology, plant and animal diversity, principles of classification, ecological relationships, and animal behavior.

The **Animal Science** pathway will equip students with principles and hands-on experience in Animal Sciences, focusing on mammalian production, anatomy, physiology, reproduction, nutrition, respiration, genetics, and veterinary skills, all integrated with Anatomy and Physiology studies.

The **Floral Design** pathway provide students with foundational knowledge in floral design, encompassing various aspects such as basic mechanics, composition requirements, diverse design forms, and the identification of flowers, foliage, and tools. Students will engage in creating and designing, as well as identifying, explaining, and evaluating a range of floral topics.

The **Ornamental Horticulture** pathway provides students with foundational knowledge of the horticulture industry. It covers a range of topics including propagation, nursery production, greenhouse management, soil testing, integrated pest management, entomology, and customer service.

The **Forestry and Natural Resources (Wildland Firefighting)** pathway is tailored to establish a foundation for students interested in pursuing a career in firefighting. The courses offer all the essential tools, skills, certifications, and knowledge necessary for becoming paid call firefighters, entering the fire academy, or working with the US Forest Service.





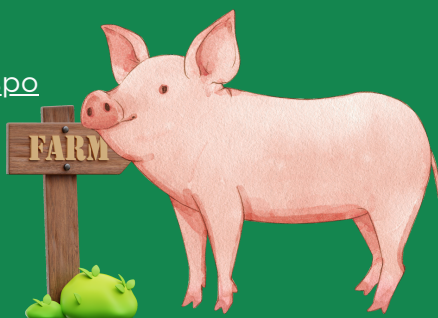
COLLEGE KNOWLEDGE

Careers in the Agriculture and Natural Resources sector are categorized into seven pathways. Dinuba High School offers courses in five of these pathways: Agriscience, Animal Science, Forestry & Natural Resources, Ornamental Horticulture, and Floral Design. These pathways are specifically designed to lay a solid foundation for students who are keen on pursuing a career in the agriculture industry. Students who choose these pathways will gain comprehensive, hands-on experiences and numerous opportunities, including managing an on-campus floral shop, working in the school's greenhouse, and participating in plant sales.

According to the Workforce Investment Board of Tulare County, in 2023, there were a total of 96,274 jobs in the Fresno, Tulare, and Kings County region, and nearly half of those jobs were in support activities for crop production. Top programs in our region include [Reedley College](#), [College of the Sequoias](#) and [Fresno State](#).

If you are interested in universities outside of the local region, consider looking at these prestigious institutions:

- [Cal Poly San Luis Obispo](#)
- [UC Davis](#)
- [Chico State](#)
- [Cal Poly Pomona](#)



Use the QR codes below to explore the programs at each local college and university.



UPCOMING EVENTS

- **Every Tuesday after school**
FSA ID Workshop
DHS Library
- **March 10**
Formal
- **March 12**
No school/ Lincoln's Birthday
- **March 17**
Saturday School
- **March 19**
No School-Washington's Birthday
- **March 23**
Talent Show 7-10pm



EDUCATION LEVEL & RELATED OCCUPATIONS

Entry Level Careers (High School Diploma)

- Fruit & Vegetable Grower 💰 \$28,230-\$37,280 ➡ Increasing Demand
- Animal Caretaker 💰 \$21,380-\$38,360 ⬆ High Demand
- Animal Trainer 💰 \$23,160-\$58,790 ⬆ High Demand
- Miner (Underground) 💰 \$38,050-\$78,060 ➡ Declining Demand
- Recycling Service Worker 💰 \$25,000-\$50,000 ➡ Increasing Demand
- Oil & Gas Well Drilling Crew 💰 \$36,890-\$96,520 ➡ Increasing Demand
- Tree Harvester 💰 \$20,810-\$90,800 ➡ Declining Demand
- Farmer 💰 \$21,840-\$126,330 ➡ Stable Demand

Technical Level Careers (Certificate and/or Associate Degree)

- Production Horticulturist 💰 \$23,000-\$75,140 ➡ Increasing Demand
- Journey-Level Butcher 💰 \$23,420-\$47,770 ➡ Declining Demand
- Forestry Technician 💰 \$32,000-\$55,000 ⬆ High Demand
- Arborist 💰 \$30,180-\$64,210 ➡ Stable Demand
- Horse Trainer 💰 \$20,000-\$60,000 ⬆ High Demand
- Forest Firefighter 💰 \$35,000-\$89,000 ⬆ High Demand
- Veterinary Technician 💰 \$28,370-\$48,100 ⬆ High Demand

Professional Level Careers (Bachelor's Degree)

- Agriculture Engineer 💰 \$55,810-\$127,030 ➡ Declining Demand
- Green House Supervisor 💰 \$29,000-\$85,000 ➡ Increasing Demand
- Food Inspector 💰 \$29,990-\$69,450 ➡ Declining Demand
- Forestry Management 💰 \$55,000-\$70,000 ⬆ High Demand
- Veterinarian 💰 \$60,760-\$165,600 ⬆ High Demand
- Botanist 💰 \$39,980-\$126,950 ➡ Increasing Demand
- Aquaculturist 💰 \$21,840-\$126,330 ➡ Stable Demand

AGRICULTURE

FOOD & NATURAL RESOURCES

Career Cluster:

Agriculture, Food & Natural Resources

Jobs in this cluster work hard to make, process, share, and take care of things like food, clothes, wood, and nature. They also help plants and animals grow and develop.

College & Career Resources

College Majors:

- Ag Business
- Animal Science
- Food Science & Nutrition
- Forestry & Natural Resources
- Mining & Mineral Engineering
- Ornamental Horticulture
- Plant Science

College & Universities:

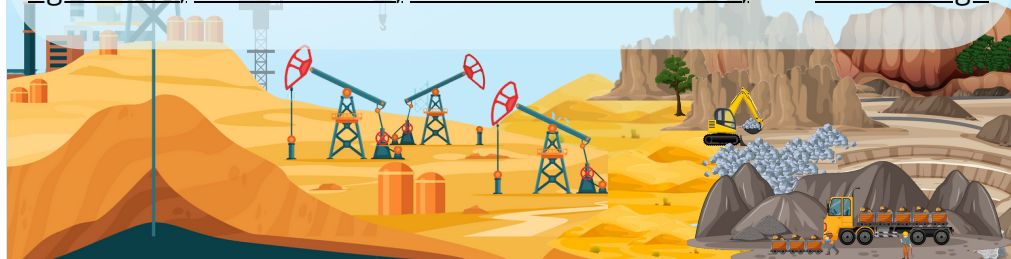
- CSU Fresno
 - Ag Business
 - Food Science & Nutrition
 - Plant Science
- Reedley College
 - Agriculture
 - Agriculture Mechanics
 - Wildland Fire
- College of the Sequoias
 - Agriculture

CLICK HERE

AGRICULTURE, FOOD & NATURAL RESOURCES

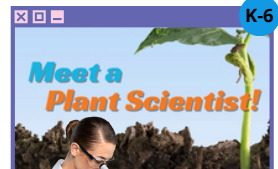
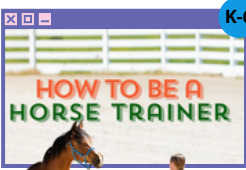
Agriculture is California's most important economic industry! California is often called the breadbasket of the world. For those who love nature, animals, or growing things, the Agriculture, Food & Natural Resources Sector may hold a great career for you!

At Dinuba High School you may study in a wide variety of classes in our 5 pathways: Forestry & Natural Resources- Wildland Firefighting, Agriscience, Animal Science, Ornamental Horticulture, and Floral Design.



ZOOM INTO CAREERS

CLICK ON VIDEOS TO LEARN MORE!



epic! SCHOOL
Books to READ!

Sign-in to Clever & click on the book to read!

The mission of the College & Career Department is to empower all students with educational and work-based experiences to ensure that they are college, career, & life ready.

For more information visit our [website!](#)