

SECTOR SPOTLIGHT: AGRICULTURE AND NATURAL RESOURCES

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STUDENT QUESTIONS & ANSWERS

Why did you pick this pathway?

I chose the AG pathway to deepen my understanding of the field and to become more involved with the FFA organization, allowing me to make a meaningful contribution to both my personal growth and the community.

Favorite thing you learned in your pathway?

My favorite thing I've learned in AG is the basics of animal science and raising livestock. I've been part of the Veterinarian Science team for two years, where I've gained many valuable skills. I've also shown livestock for three years, including two goat projects and two cattle projects. These experiences have taught me responsibility and hard work, which I enjoy most.

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

Like many FFA members, I take part in speaking contests, CDE teams, and conferences. I also show livestock and serve as an FFA officer. These experiences connect to the agriculture pathway by incorporating FFA, SAE, and classroom components.

Favorite memory of being a part of the pathway.

My favorite memory from the Agriculture pathway was attending conferences. These events allowed me to meet new people, develop leadership skills, and gain a deeper understanding of agriculture's impact on the world.

Advice to students interested in your pathway.

One piece of advice I'd give is not to hold back just because you're afraid of new experiences. If you're nervous at an event, chances are others are feeling the same way. Don't overthink it - Everything will work out.

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

Participating in FFA and studying animal science can equip me with the skills needed for a veterinary career. FFA provides hands-on experience in animal care, leadership development, and exposure to agriculture, all essential for the veterinary field. Animal science courses dive into animal behavior, health, and more, deepening my knowledge. Together, these experiences create a strong foundation for veterinary studies and the skills needed in the field.

What are your plans after high school?

My journey to establishing a clear plan after high school has been uncertain, but through the AG pathway, I discovered that pursuing a career as a veterinary practitioner is the perfect fit for me. I hope to attend college after graduation to complete the necessary coursework for vet school. From there, I will hone my skills to succeed in the field.

How has this pathway prepared you for the future?

The Agriculture pathway at Dinuba High School has prepared me for the future in various ways. One of the most important things I learned was how to rely on myself. Through my supervised agricultural experience, I encountered challenges that only I could resolve. It helped me by showing that I can handle things on my own when I need to, just like I'll have to in the future.



EMMALEE KENNEY
JUNIOR



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 provides 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.



AGRICULTURE AND NATURAL RESOURCES



COLLEGE KNOWLEDGE

Careers in the Agriculture and Natural Resources sector are divided into seven pathways. At Dinuba High School, students can explore five of these pathways: Agriscience, Animal Science, Ornamental Horticulture, Floral Design, and Forestry & Natural Resources. These pathways are carefully designed to provide a strong foundation for students interested in pursuing careers in the agriculture industry. Participants gain valuable, hands-on experience and enjoy unique opportunities such as 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, there were 96,274 jobs in the Fresno, Tulare, and Kings County region in 2023, with nearly half of those jobs related to operational support for crop production. Top local programs include Reedley College, College of the Sequoias and Fresno State.

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



If you're interested in universities outside the local region, consider exploring these institutions:

-Cal Poly San Luis Obispo

-UC Davis

-Chico State

-Cal Poly Pomona



UPCOMING events

- FEB. 6TH**
College & Career Exploration Workshop
DHS Library
- FEB. 7TH**
National History Day
DHS Student Union
Emperor of the Month
DHS Cafeteria
- FEB. 8TH**
Winter Formal
- FEB. 10TH**
NO SCHOOL/PRESIDENT'S DAY
- FEB. 17TH**
NO SCHOOL/PRESIDENT'S DAY
- FEB. 20TH**
College & Career Exploration Workshop
DHS Library
- MARCH 1ST**
Mr. Emperor



EDUCATION LEVEL & RELATED OCCUPATIONS

Entry Level Careers (High School Diploma)

- Fruit & Vegetable Grower 💰 \$28,230-\$37,280 ➡ Stable Demand
- Animal Caretaker 💰 \$21,380-\$40,000 ➡ Stable Demand
- Animal Trainer 💰 \$23,160-\$60,000 ➡ Stable Demand
- Miner (Underground) 💰 \$48,050-\$80,000 ➡ Declining Demand
- Recycling Service Worker 💰 \$30,000-\$50,000 ➡ Increasing Demand
- Oil & Gas Well Drilling Crew 💰 \$50,000-\$99,500 ➡ Stable Demand
- Tree Harvester 💰 \$40,000-\$70,000 ➡ Stable Demand
- Farmer 💰 \$40,000-\$126,330 ➡ Stable Demand

Technical Level Careers (Certificate and/or Associate Degree)

- Production Horticulturist 💰 \$30,000-\$88,000 ➡ Stable Demand
- Journey-Level Butcher 💰 \$33,420-\$45,770 ➡ Stable Demand
- Forestry Technician 💰 \$35,000-\$55,000 ➡ Stable Demand
- Arborist 💰 \$40,180-\$64,210 ➡ Increasing Demand
- Horse Trainer 💰 \$25,000-\$60,000 ➡ Stable Demand
- Forest Firefighter 💰 \$35,000-\$89,000 ➡ Increasing Demand
- Veterinary Technician 💰 \$35,000-\$50,000 ➡ Increasing Demand

Professional Level Careers (Bachelor's Degree)

- Agriculture Engineer 💰 \$60,000-\$127,030 ➡ Increasing Demand
- Green House Supervisor 💰 \$40,000-\$85,000 ➡ Stable Demand
- Food Inspector 💰 \$45,000-\$75,000 ➡ Stable Demand
- Forestry Management 💰 \$55,000-\$85,000 ➡ High Demand
- Veterinarian 💰 \$70,000-\$165,600 ➡ High Demand
- Botanist 💰 \$50,000-\$126,950 ➡ Stable Demand
- Aquaculturist 💰 \$45,000-\$126,330 ➡ Increasing Demand

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



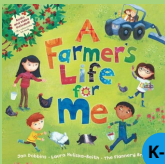
Can we create the "perfect" farm?
A guide to the energy of the Earth

CLICK HERE

epic!

SCHOOL

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



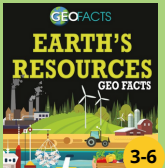
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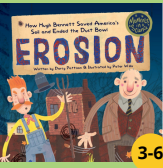
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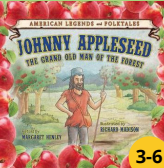
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3-6

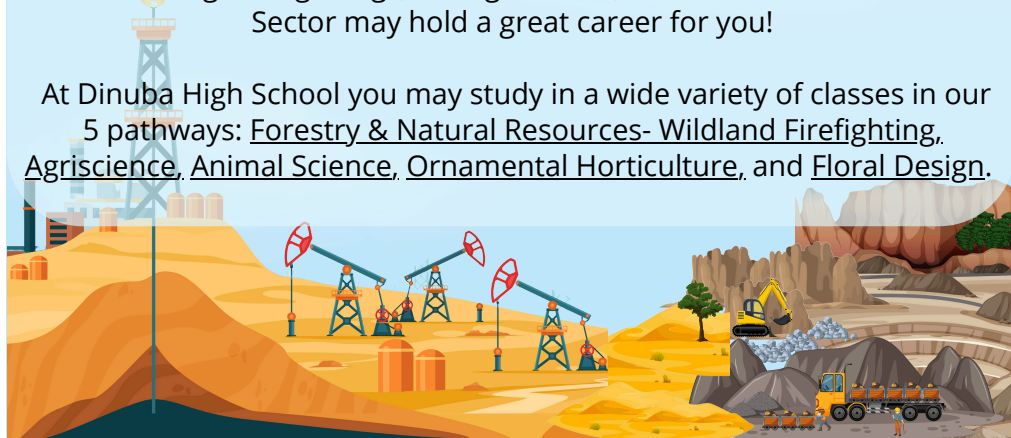


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AGRICULTURE, FOOD & NATURAL RESOURCES

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!

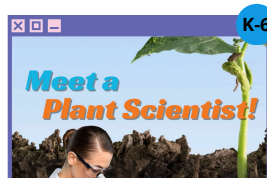


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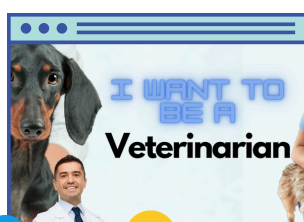
DAY IN THE LIFE OF A
FARMER DURING
HARVEST



K-6



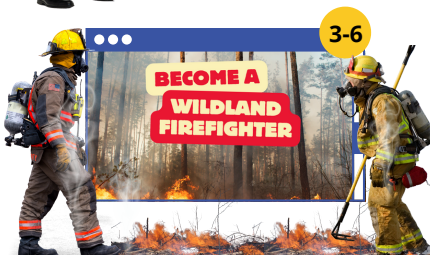
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K-2

3-6

Meet a
Veterinary
Technician



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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!](#)