

# Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.



## Animal Science (JHS) Statewide Program of Study



The Animal Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of animals and other living organisms. This program of study includes applying biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students will research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.



### Secondary Courses for High School Credit

Level 1	T101 Principles of Agriculture, Food, & Natural Resources (1 credit/YL)
Level 2	T110 Small Animal Management (.5 credit/Sem.)  T113 Equine Science (.5 credit/Sem.)
Level 3	T111 Veterinary Medical App/Lab (2 credits/YL)
Level 4	T109 Advanced Animal Science (1 credit/YL)  T137 Practicum in AFNR Ext. -Animal Science (3 credits/YL)



### Example Postsecondary Opportunities

#### Apprenticeships

- Reproduction Technician

#### Associate Degrees

- Biological and Physical Sciences
- Entomology

#### Bachelor's Degrees

- Animal Science
- Zoology/Animal Biology

#### Master's, Doctoral, and Professional Degrees

- Marine Sciences
- Biotechnology

#### Additional Stackable IBCs/License

- Veterinarian
- Certified Veterinary Technician



### Work-Based Learning and Expanded Learning Opportunities

<b>Work-Based Learning Activities</b>	<ul style="list-style-type: none"> <li>• Shadow an animal scientist in a biology lab to learn about applying science to understand animals and wildlife</li> <li>• Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic</li> </ul>
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>• Participate in an FFA career, leadership, and speaking contest like an agriscience fair</li> <li>• Attend an agricultural industry seminar</li> </ul>



### Aligned Industry-Based Certifications

- Certified Veterinary Assistant, Level I
- Elanco Fundamentals of Animal Science



### Example Aligned Occupations

#### **Veterinary Assistants and Laboratory Animal Caretakers**

Median Wage: \$29,906  
Annual Openings: 1,348  
10-Year Growth: 24%

#### **Veterinary Technologists and Technicians**

Median Wage: \$33,679  
Annual Openings: 1,217  
10-Year Growth: 24%

#### **Veterinarian**

Median Wage: \$103,160  
Annual Openings: 347  
10-Year Growth: 26%

Animal Science

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>