



# O'Donnell High School 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.

## Statewide Program of Study: **Animal Science**

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

You must complete four credits from this list, including at least one Level 3 or Level 4 course.

- |         |   |
|---------|---|
| Level 1 | <ul style="list-style-type: none"> <li>Principles of Agriculture, Food, and Natural Resources</li> </ul>                      |
| Level 2 | <ul style="list-style-type: none"> <li>Small Animal Management</li> <li>Equine Science</li> <li>Entrepreneurship I</li> </ul> |
| Level 3 | <ul style="list-style-type: none"> <li>Livestock &amp; Poultry Production</li> </ul>  |
| Level 4 | <ul style="list-style-type: none"> <li>Advanced Animal Science</li> </ul>   |

## Aligned Advanced Academic Course

### Dual Credit

- AGRI 2321 Livestock Evaluation
- AGRI 1311 Dairy Science

## Aligned Industry-Based Certification

Elanco Feedyard Technician in Cattle Care and Handling



Successful completion of the Animal Science program of study will fulfill requirements of a Business and Industry endorsement.



## 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



## 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%

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>





# Agriculture, Food, and Natural Resources Career Cluster

## Statewide Program of Study: Animal Science

### Course Information

Level	Course	Prerequisites   Corequisites	Career Clusters
Level 1	<b>Principles of Agriculture, Food, and Natural Resources</b> 7000 (OHS Course #) 13000200 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
Level 2	<b>Small Animal Management</b> 7006 (OHS Course #) 13000400 (0.5 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
	<b>Equine Science</b> 7016 (OHS Course #) 13000500 (0.5 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
	<b>Entrepreneurship I*</b> 7049 (OHS Course #) 13011101 (1 credit)	<b>Prerequisites:</b> None <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> Principles of Business <b>Recommended Corequisites:</b> None	
Level 3	<b>Livestock &amp; Poultry Production</b> 7001 (OHS Course #) 13000300 (1 credit)	<b>Prerequisites:</b> Minimum of two credits with at least one course in a Level 2 or higher from the AFNR career cluster <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	
Level 4	<b>Advanced Animal Science</b> 7015 (OHS Course #) 13000700 (1 credit)	<b>Prerequisites:</b> Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production <b>Corequisites:</b> None <b>Recommended Prerequisites:</b> None <b>Recommended Corequisites:</b> None	

For additional information on the **Agriculture, Food, and Natural Resources** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>