Millsap High School

Revised–September 2024

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

Level 1	• Principles of Agriculture, Food, and Natural Resources
Level 2	• Small Animal Management (Fall Semester) • Equine Science (Spring Semester
Level 3	• Livestock Production
Level 4	• Advanced Animal Science and/or • Practicum in Agriculture, Food, and Natural Resources or • Practicum in Agriculture, Food, and Natural Resources + Extended Practicum in Agriculture, Food, and Natural Resources



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

Work-Based Learning Activities	• Shadow an animal scientist in a biology lab to learn about applying science to understand animals and wildlife • Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic • Work for a local livestock producer
Expanded Learning Opportunities	• Participate in an FFA career, leadership, and speaking contest like an agriscience fair or judging contest • Attend an agricultural industry seminar • Obtain your Veterinary Assistant Certification

Aligned Industry-Based Certifications

- AgriLife Veterinary Assistant Certificate
- Elanco Fundamentals of Animal Science Certification
- Equine Management and Evaluation Certification

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

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

For more information visit:
https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources

Animal Science