



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.



Courses for High School Credit

Level 1	Principles of Agriculture, Food, and Natural Resources
Level 2	- Small Animal Management - Equine Science - Entrepreneurship
Level 3	- Livestock and Poultry Production - Veterinary Science
Level 4	- Advanced Animal Science - Practicum in Animal Science - Practicum in Veterinary

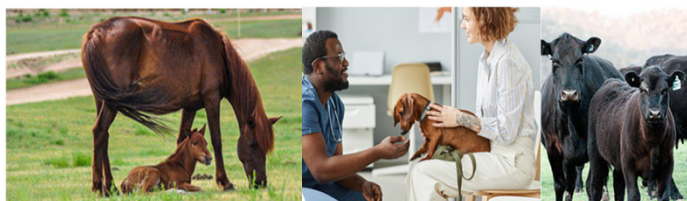
Aligned Industry-Based Certifications

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

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
Expanded Learning Opportunities	- Participate in an FFA career, leadership, and speaking contest like an agriscience fair - Attend an agricultural industry seminar



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: \$33,581

Annual Openings: 1,953

10-Year Growth: 24%

Veterinary Technologists and Technicians

Median Wage: \$35,698

Annual Openings: 1,820

10-Year Growth: 24%

Veterinarians

Median Wage: \$125,030

Annual Openings: 435

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/afnr-animal-science-extended.pdf>





Animal Science Course Descriptions:

Principles of Agriculture, Food, and Nat Resources- AGR0000 (1 Credit)

Level: 1 Course Fee: None
Prerequisites: None GPA Weight: Regular

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.

Small Animal Management- AGR1257 (.5 credit)

Level: 2 Course Fee: None
Prerequisites: None GPA Weight: Regular

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.

Equine Science- AGR1227 (.5 credit)

Level: 2 Course Fee: None
Prerequisites: None GPA Weight: Regular

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules.

Entrepreneurship- BUS1220 (1 credit)

Level: 2 Course Fee: None
Prerequisites: None GPA Weight: Regular

Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services.

Livestock and Poultry Production- AGR3240 (1 credit)

Level: 3 Course Fee: \$25
Prerequisites: Small Animal & Equine Science GPA Weight: Regular

In Livestock and Poultry Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry.

Veterinary Science- AGR3120 (1 credit)

Level: 3 Course Fee: \$45 (Uniform Fee)
Prerequisites: Small Animal & Equine Science GPA Weight: Regular

Veterinary Science covers topics relating to veterinary practices, including practices for large and small animal species.

Advanced Animal Science- AGR1220 (1 credit)

Level: 4 Course Fee: None
Prerequisites: Bio. & Chem./IPC, Alg. I & Geom., Veterinary Science or Livestock & Poultry Production GPA Weight: Regular

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

Note: This course satisfies a science credit requirement for students on the Foundation High School Program. Available for Dual Credit from Tarleton State University (AGR1220D)

Practicum - Animal Science- AGR4600 (2 credits)

Level: 4 Course Fee: None
Prerequisites: Livestock & Poultry Production or Veterinary Science GPA Weight: Regular

This practicum course includes a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.

Practicum - Veterinary Science- AGR3130 (2 credits)

Level: 4 Course Fee: None
Prerequisites: Livestock & Poultry Production or Veterinary Science GPA Weight: Regular

This practicum course includes a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.

