

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 a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Animal Science Statewide Program of Study



Career & Technical Education

The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. This pathway encompasses everything from putting food on our tables to turning raw materials into products everyone uses. Students will apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field. Students conclude with courses focusing on animal health and welfare, including diagnosis and treatment of diseases and injuries of animals.

Secondary Courses for High School Credit

9th Grade

- Principles of Agriculture, Food, and Natural Resources

10th Grade

- Small Animal Management (Fall)
- Equine Science (Spring)

11th Grade

- Livestock Production/Lab (AAC)

12th Grade

- Advanced Animal Science (AAC)

or

- Veterinary Medical Applications + Lab (AAC)

9th - 12th Grade

Floral Design (Non-Pathway Course)

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities

- Participate in FFA supervised agriculture experience

Work-Based Learning Activities

- Volunteer at a local farm or with a veterinarian

Industry-Based Certifications

- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications
- TVMA Certified Veterinary Assistant Level 1

Postsecondary Opportunities

Associates Degrees

- Food Science and Technology
- Veterinary Studies
- Biotechnology Laboratory Technician
- Biology Technician
- Agriculture Technician

Bachelor's Degrees

- Animal Sciences
- Agriculture
- Biology
- Zoology/ Animal Biology

Master's, Doctoral, and Professional Degrees

- Genetics
- Veterinary Medicine
- Biological and Physical Sciences
- Biological and Biomedical Sciences



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	\$39,139	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%