

Sioux Central Community School District

High School Course Outline



Department: Agricultural Education
Course Title: [Agricultural Science - Animal](#)
Grade Level: [10-11-12](#)
Length of Course: [Year-long](#)

Brief Course Description:

Do you enjoy working with animals? Would you like to know more about animal behavior, anatomy, and health? Gain foundational knowledge and skills through the *Principles of Agricultural Science – Animal* course to prepare for working with animals.

Spend the year investigating how animals and humans are dependent upon each other. Evaluate the management practices used by humans to keep animals safe and healthy. Design an animal facility for your favorite species of animal and build a model. Develop an animal care plan and perform routine healthcare practices. Brainstorm a business plan related to the animal industry or companion animals.

During class, expand your portfolio of career exploration and leadership development opportunities discovered along the way. Take part in career exploration and leadership development experiences outside of school and seek out post-secondary opportunities and scholarships related to your interest in animals.

Goals for Course/Essential Outcomes

1. Agriculture, food, and natural resources systems produce the food, fiber, and fuel that are essential to daily life as well as contribute to the nation's economic wealth.
3. Agriculture is a science that contributes to the development, improvement, and sustainability of living things.
4. Agricultural education establishes a relevant setting for the application of mathematical practices and principles.
6. Reading and writing interpretation skills are necessary for educational and professional development.
8. Inquiry activities are important in the practice of scientific processes and in the world of research.
10. Consideration of the ethical, environmental, social, and economic impacts of agricultural practices is essential to being a responsible, involved citizen.

List from the [Curriculum for Agricultural Science Education Major Concepts](#).

Outline of Content for Major Areas of Study:

Career Ready Practices

Apply appropriate academic and technical skills.
Communicate clearly, effectively and with reason.
Employ valid and reliable research strategies.

AFNR Career Cluster

Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.

Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role agriculture, food and natural resources (AFNR) play in society and the economy.

Describe career opportunities and means to achieve those opportunities in each of the AFNR career pathways.

Analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and the sustainable use of natural resources.

Animal Systems Career Pathway

Analyze historic and current trends impacting the animal systems industry.

Utilize best practice protocols for husbandry and welfare based upon animal behaviors.

Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction, and/or economic production.

Apply principles of animal reproduction given desired outcomes for performance, development, and/or economic production.

Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.

Classify, evaluate, and select animals based on anatomical and physiological characteristics.

Apply principles of effective animal health care.

From the [Common Career and Technical Core: Agriculture, Food, and Natural Resources](#) (National) and [CTE Standards 2019 Agriculture, Food, and Natural Resources](#) (Iowa)

Grading Configuration:

- Classwork - daily work - binder/notebook checks
20 points per unit = **~40-60 points/quarter**
- Projects & problems
10 points per task = **~30-50 points/quarter**
- SAE Foundational Career Exploration
= **~10 points/quarter**

Semester Break-down:

- A. Quarter 1/3 = 40%
- B. Quarter 2/4 = 40%
- C. Final = 20%

Supplementary Literature:

Gillespie, J.R., & Flanders, F.B. (2015). *Modern livestock and poultry production (9th ed.)*. Clifton Park, NY: Delmar.

Herren, R.V. (2007). *The science of animal agriculture (3rd ed.)*. Clifton Park, NY: Delmar.

Other: Based upon the [CASE Principles of Agricultural Science - Animal](#) course.