

Troy High School Agricultural Education

Animal Science Course Syllabus

Course Description

Animal Science is a hands-on Career and Technical Education (CTE) course that explores the science, management, and care of domestic livestock, companion animals, and other animal species. Students study anatomy, physiology, nutrition, genetics, reproduction, health, behavior, and animal welfare through classroom instruction, labs, and projects.

Course Objectives

- Explain the importance of the animal agriculture industry.
- Identify major livestock breeds and species.
- Understand animal anatomy and physiology.
- Explain principles of animal nutrition and digestive systems.
- Describe basic animal genetics and reproduction.
- Recognize common animal diseases and biosecurity practices.
- Demonstrate proper animal handling and welfare techniques.
- Evaluate livestock based on structural correctness and performance.
- Apply scientific reasoning to animal production practices.
- Demonstrate professionalism, teamwork, and responsibility.

Major Units

- Introduction to Animal Science
- Careers in Animal Agriculture
- Animal Safety and Biosecurity
- Animal Behavior and Welfare
- Animal Anatomy and Physiology
- Animal Nutrition
- Genetics and Reproduction
- Animal Health and Disease Prevention
- Beef Cattle Production
- Swine Production
- Sheep and Goat Production
- Poultry Production
- Dairy Production
- Companion Animals
- Livestock Evaluation
- Animal Science Careers

Classroom Expectations

- Arrive on time and prepared for class.
- Participate actively in discussions, labs, and activities.
- Treat classmates, instructors, and animals with respect.
- Follow all classroom and laboratory safety procedures.
- Keep cell phones put away unless permission is given for instructional use.
- Complete assignments and projects on time.
- Demonstrate responsibility and professionalism.
- Clean up work areas and return materials after activities.

Laboratory Safety

- Follow all instructor directions.
- Handle laboratory equipment responsibly.
- Practice proper hygiene before and after animal-related activities.
- Treat all animals humanely and respectfully.
- Report accidents, injuries, or unsafe conditions immediately.
- Wear appropriate clothing and footwear for labs when required.

Required Materials

- Notebook or binder
- Pencil or pen
- Chromebook or school-issued device (when available)
- Folder for handouts
- Appropriate clothing for laboratory activities when announced

Parent/Guardian Communication

Parents and guardians are encouraged to contact Ms. Bruce with questions regarding student progress, classroom expectations, or course requirements.

Student Acknowledgment

I have read and understand the Animal Science syllabus and agree to follow all classroom and laboratory expectations.

Student Name: _____

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____