

STRANDS AND STANDARDS

SMALL COMPANION ANIMAL SCIENCE



Course Description

This class is a look at the relationship between humans and their companion animals. Species we learn about include: dog, horse and cats, with an emphasis on dogs. The curriculum will cover a broad variety of areas include: zoology, animal behavior, training and learning theories, genetics and health care, animal husbandry, animal rescue, competition events and career exploration. Students will also learn about the role of FFA as it relates to companion animals.

Intended Grade Level	9-12
Units of Credit	1.0
Core Code	30.02.00.00.005
Concurrent Enrollment Core Code	N/A
Prerequisite	N/A
Skill Certification Test Number	129
Test Weight	1.0
License Type	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Agriculture (CTE/General)
Endorsement 2	Animal Science
Endorsement 3	N/A

STRAND 1

Students will explain the role of FFA in agricultural education.

Standard 1

Discuss the history and organization of FFA as it relates to the complete program of agricultural education.

- Explain the interrelationship of classroom and laboratory instruction, supervised agricultural experience, and FFA.
- Describe how, when, and why FFA was organized.
- Identify key FFA historical events.
- Identify the mission and strategies, colors, motto, emblem and parts of the emblem, and organizational structure of FFA.
- Recite and explain the meaning of the FFA Creed.
- Discuss the meaning and purpose of a program of activities and its committee structure.
- List FFA chapter officers, and discuss the role of each.

Standard 2

Identify opportunities in FFA

- Describe FFA opportunities that develop leadership skills, personal growth, and career success.
- Summarize major state and national activities available to FFA members.

Standard 3

Describe FFA degrees, awards, and career development events (CDEs).

- List and explain the FFA degree areas.
- Identify FFA proficiency awards.
- List and discuss various team and individual CDEs.

Performance Objective

- Attend a FFA Chapter meeting.

STRAND 2

Students will explain the role of supervised agricultural experience (SAE) programs in agricultural education.

Standard 1

Examine the responsibilities and benefits associated with an SAE.

- Explain the meaning and benefits of supervised agricultural experience.
- Explain the characteristics of an effective SAE program and the responsibilities of those involved.

Standard 2

Determine the types of SAE programs.

- Compare entrepreneurship SAEs and placement SAEs.
- Describe research/experimentation SAEs.
- Describe exploratory SAEs.

Standard 3

Plan an SAE program.

- Identify the steps in planning an SAE program.
- Describe the function of a business/training plan and/or agreement in an SAE program.
- Develop a short-range plan and a long-range plan for an SAE program.
- Relate classroom and laboratory instruction to an SAE program.

Standard 3

Maintain and use SAE records.

- Explain the importance of keeping records on an SAE program.
- Explain how SAE records are organized.
- Follow approved procedures to make entries in SAE records.

Performance Objective

- Successfully complete a Supervised Agricultural Experience Program.

STRAND 3

Students will understand the meaning of Taxonomy, Binomial Nomenclature and Dichotomous keys.

Standard 1

Know the common names used to identify the sex/age of the following companion animals; horse, dog, and cat.

Standard 2

Demonstrate a knowledge of Binomial Nomenclature as it is used to identify and classify animals including how it helps to identify how different species may be related.

Standard 3

Know the seven levels of taxonomic classification in order from most general to most specific.

- Kingdom, Phylum, Class, Order, Family, Genus, and Species.

Performance Objective

- Identify common anatomical organs.

STRAND 4

Students will understand the processes of domestication.

Standard 1

Understand the difference between domestication and tameness.

Standard 2

Understand the difference between Artificial Selection (Selective Breeding) and Natural Selection.

Standard 3

Understand that the process of domesticating animals can also create physiological, behavioral, and physical changes in the animal.

Standard 4

Be able to define Charles Darwin's "Mysterious Law of Correlation", that as you select for specific genotypes there can be multiple side effects that are correlated to the genome that you are manipulating. Example; selecting for temperament can also bring changes to conformation or color.

STRAND 5

Students will understand animal anatomy and physiology as it relates to nutrition, health, management and the behavior of domesticated animals.

Standard 1

Demonstrate knowledge of the following anatomic systems.

- Skeletal, Muscular, Nervous, Circulatory, Respiratory, Digestive, Excretory, Endocrine, and Reproductive.

Standard 2

Demonstrate knowledge of dog, horse and cat senses.

- Olfactory system (smell)
- Gustation (taste)
- Auditory System (hearing)
- Tactile (touch)
- Vision (sight)
 - With an understanding of the differences in vision of prey and predator animals.

Standard 3

Demonstrate knowledge of common diseases and parasites.

- Understand how disease are transmitted.
- Understand common diseases in dogs, horses and cats.
 - Horse; Eastern / Western Equine Encephalitis, Tetanus, West Nile Virus, Strangles, Colic, etc.

- Canine; Canine distemper, Canine parvovirus, Canine heartworm, Canine kennel cough, Canine Roundworm, etc.
- Feline; Feline Panleukopenia (distemper), Feline Immunodeficiency Virus, Feline Infectious Peritonitis, Toxoplasmosis, Rabies, etc.
- Understand vaccination protocols in dogs, horses and cats.

Standard 4

Demonstrate a knowledge of basic First Aid and CPR with companion animals.

- Understand and demonstrate CPR.
- Understand and demonstrate First Aid techniques.
- Understand signs of an emergency.
 - Respiratory distress, Blood loss, Swelling, Non-weight bearing lameness, Fever, Pain.
- Demonstrate knowledge of first aid supplies and uses.

Standard 5

Demonstrate knowledge of nutritional needs of dogs, horses and cats.

- Understand the basic nutritional diets for dogs, horses and cats.
- Have an understanding of alternative diets to treat medical condition in dogs, horses and cats.

Standard 1

Have an understanding of nontraditional health care.

- Acupuncture, Massage therapy, Hydrotherapy, Chiropractic therapy, etc.

Performance Objective

- Demonstrate 3 of the following first aid skills: check respiratory rate, temperature, capillary refill time, pulse, put on a splint, perform CPR.

STRAND 6

Students will understand the reproduction processes for dogs, cats and horses.

Standard 1

Understand the estrous cycle.

Standard 2

Understand natural breeding practices and alternative breeding practices.

Standard 3

Understand gestation.

Standard 4

Understand stages of development.

Standard 5

Understand population control methods in dogs and cats.

STRAND 7

Students will understand different methods employed for animal training, different learning styles and behavior problems of domesticated animals.

Standard 1

Understand animal behavior and learning theory.

- Classical Conditioning
- Operant Conditioning
- Trial and Error Learning
- Observational Learning

Standard 2

Demonstrate a knowledge of different training methods.

- Demonstrate methods such as luring, placement, compulsion and operant conditioning.

Standard 3

Demonstrate knowledge of common behavior problems.

- Dog; Barking, House soiling, Separation anxiety, Noise anxiety, Biting and aggression, Resource guarding, etc.
- Cat; Urine marking, Aggression, Scratching, Fear behaviors, etc.

Standard 4

Demonstrate knowledge of behavior modification protocols.

- Remedial socialization
- Desensitization
- Clicker training
- Counter conditioning

Performance Objective

- When given an animal behavior problem the student will be able to demonstrate at least one behavior modification protocol to fix the problem.
- Demonstrate how to use different training techniques.

STRAND 8

Students will understand Ethology and how it relates to animal behavior.

Standard 1

Demonstrate a knowledge of how animals use body language to communicate (Ethology).

Standard 2

Demonstrate knowledge for the use of ethograms and how they are used in animal welfare.

Performance Objective

- Using an ethogram, observe a dog and determine what they are trying to communicate.

STRAND 9

Students will understand Animal Welfare and Animal Rescue

Standard 1

Demonstrate a knowledge of animal enrichment and welfare.

- Understand that animal welfare involves both the physical health of the animals as well as their psychological well-being.
- Understand enrichment activities for different species.
- Describe and understand the difference between animal welfare and animal rights.

Standard 2

Demonstrate a knowledge of Animal Rescues.

- Demonstrate knowledge of different organizations involved in animal rescues.
- Demonstrate knowledge of the causes and effects animal rescues plays in a community.

Performance Objective

- Demonstrate the use of an enrichment activity with dogs, cats and horses.

STRAND 10

Student will understand different competitions relating to dogs or horses.

Standard 1

Demonstrate a knowledge of different competitions with animals.

- Dog showing.
- Horse showing.

Standard 2

Students will understand correct structure (confirmation) and movement.

- Demonstrate knowledge of the part this plays in working ability and breeding.

Standard 3

Students will understand the concept of different breeds in a species.

- Demonstrate knowledge of a breed standards and selective breeding.
- Demonstrate knowledge of roles different breeds have.
- Demonstrate knowledge of the role a breed standard places in showing competitions.

