

STRANDS AND STANDARDS

SMALL & COMPANION ANIMAL SCIENCE



Course Description

This class is a look at the relationship between humans and their companion animals. Species covered 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 participate in personal and leadership development through the FFA and work-based learning activities through their supervised agricultural experience program.

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	119
Test Weight	1.0
License Area of Concentration	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Agriculture (CTE/General)
Endorsement 2	Animal Science
Endorsement 3	

STRAND 1

Student will participate in personal and leadership development activities through the FFA.

Standard 1

Student will use communication skills to effectively communicate with others.

- Understand when it is appropriate to listen and to speak.
- Understand and follow verbal and written instructions for classroom and laboratory activities.
- Will practice communication skills through public speaking using one or more of the following activities: memorized speech, prepared speech, extemporaneous speech, parliamentary practice, group presentation, or serving in a leadership capacity.

Standard 2

Student will effectively use teamwork to respectfully work with others.

- Identify and understand different roles in working with a team.
- Lead a group discussion or serve in a leadership capacity.

Standard 3

Student will use critical thinking and problem-solving skills.

- Analyze the cause of the problem.
- Develop a solution to address the problem.
- Implement the plan.
- Evaluate the effectiveness of the plan.

Standard 4

Student will be dependable, reliable, steady, trustworthy, and consistent in performance and behavior.

- Set and meet goals on attendance and punctuality.
- Prioritize, plan, and manage work to complete assignments and projects on time.

Standard 5

Student will be accountable for results.

- Use an achievement chart for activities and behaviors in class that encourages a personal evaluation of classroom performance.
- Use reflection to describe what was learned, what went well, what could have been improved, and what are the implications to the learning process.
- Track and communicate progress toward completion of assignments and projects.

Standard 6

Be familiar with the legal requirements and expectations of the course.

- Be familiar with the course disclosure statement and all requirements for successful completion of the course.
- Demonstrate workplace ethics, e.g., fair, honest, disciplined.

STRAND 2

Student will participate in work-based learning activities through the Supervised Agricultural Experience (SAE) Program.

Standard 1

Student will demonstrate employability skills.

- Use a career search network to find career choices.
- Identify appropriate CTE Pathway for selected career choice.
- Prepare for entry into the work force by completing one of the following: list of required skills needed for a career choice, a resume including a list of demonstrated skills, a cover letter or letter of application, a job application, or participate in an actual or simulated job interview.

Standard 2

Student will participate in a work-based learning experience outside the classroom.

- Student will plan and implement a Supervised Agricultural Experience Program:
- Foundational SAE: Career exploration and planning, employability skills for college and career readiness, personal financial management and planning, workplace safety, and agricultural literacy.
- Immersion SAE: Ownership/entrepreneurship, placement/internship, research, school-based enterprise, and/or service-learning experiences.

Standard 3

Student will develop a job portfolio specific to their selected SAE/WBL experience.

- Student will keep a personal record/journal/log of their SAE/WBL experience; including pictures, financial records or log of their hours, skills learned, goals, reflection, etc.

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 and 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.

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

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 identify signs of an emergency.
- Understand and identify signs of respiratory distress, blood loss, swelling, non-weight bearing lameness, fever, pain.
- Demonstrate knowledge of first aid supplies and uses.
- Demonstrate knowledge of the following first aid skills:
 - Check respiratory rate,
 - Check temperature,
 - Check capillary refill time,
 - Check pulse,
 - Put on a splint.

Standard 5

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

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

Standard 6

Understand nontraditional health care.

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

STRAND 6

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

Standard 1

Understand the estrous cycle in dogs, horses, and cats.

Standard 2

Understand natural breeding practices and alternative breeding practices for dogs, horses, and cats.

Standard 3

Understand the gestation period and fetal development for dogs, horses, and cats.

Standard 4

Understand the difference between Precocial (developed at birth) and Altricial (un-developed at birth).

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

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.

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.

STRAND 10

Student will understand different competitions relating to dogs or horses.

Standard 1

Demonstrate a knowledge of different competitions with animals.

- Understand the purpose of the American Kennel Club.
- Demonstrate knowledge of the purpose and process of dog showing.
- Demonstrate knowledge of the purpose and process of 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.

STRAND 11

Students will understand roles that animals play in the community.

Standard 1

Understand the role of service and therapy animals.

Standard 2

Have knowledge of the Americans with Disabilities Act (ADA) requirements for an animal to be designated as a service animal.

Standard 3

Understand the role of human-animal bonding.

Performance Skills

- Set and meet goals on attendance and punctuality.
- Lead a group discussion or serve in a leadership capacity.
- Practice communication skills through public speaking using one or more of the following activities: memorized speech, prepared speech, extemporaneous speech, parliamentary practice, group presentation, or serving in a leadership capacity.
- Student will plan and implement a Supervised Agricultural Experience Program:
- The student will be able to interpret and extract information from realistic medical documents.
- Use proper terminology to identify the sex and age of dogs, cats, and horses.
- Demonstrate 3 of the following first aid skills: check respiratory rate, temperature, capillary refill time, pulse, put on a splint, preform CPR.
- 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.
- Using an ethogram, observe a dog and determine what they are trying to communicate. Demonstrate the use of an enrichment activity with dogs, cats, and horses.

Skill Certification Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		
												11	
												4	