south dakota DEPARTMENT OF EDUCATION
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CTE Standards Unpacking
Companion Animals

Course: Companion Animals
Course Description: Companion Animals will address the basic knowledge and skills necessary for careers in the Agriculture, Food and Natural Resources sector. Urban and rural students desire training in areas of animal care. Careers in the small animal industry are growing quickly. Utilizing appropriate equipment may enhance classroom and laboratory content, and technology, mathematics, English, biology and human relations skills will be reinforced in the course. Work-based learning strategies appropriate for this course are school-based enterprises and field trips. This class is reinforced through the FFA and SAE activities such as the Livestock Evaluation Career Development Event and related Proficiency Awards. Each student will be expected to maintain a Supervised Agricultural Experience (SAE).
Career Cluster: Agriculture, Food and Natural Resources
Prerequisites: Recommended: Introduction to AFNR
Program of Study Application: Companion Animals is a first pathway course in the Agriculture, Food and Natural Resources Program of Study, Animal Systems pathway. Companion Animals is preceded by a cluster course and is recommended to be taken prior to participation in Advanced Animal Science or Ag Biotechnology.

<table>
<tr><td colspan="3">INDICATOR #CA 1: Examine the anatomy and physiology of small animals.</td></tr>
<tr><td colspan="3">SUB-INDICATOR 1.1 (Webb Level: 3 Strategic Thinking): Use classification systems to explain the anatomy and physiology of companion animals.teCC</td></tr>
<tr><td colspan="3">SUB-INDICATOR 1.2 (Webb Level: 3 Strategic Thinking): Differentiate between species' reproductive cycles.</td></tr>
<tr><td colspan="3">SUB-INDICATOR 1.3 (Webb Level: 3 Strategic Thinking): Analyze elements between male and female reproductive systems.</td></tr>
<tr><td>Knowledge (Factual):
-Animal body systems

-Animal species and breeds

-Animal breeding systems

-Determine animal genders</td><td>Understand (Conceptual):
-Importance of the relationships between body systems

-Importance of spaying and neutering</td><td>Do (Application):
-Compare and contrast animal species

-Assess animal readiness for breeding

-Examine animal reproductive tract

-Observe a veterinarian spay an animal</td></tr>
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Benchmarks:
Students will be assessed on their ability to:

- Compare and contrast gestational cycles.
- Develop a model of reproductive systems.
- Create a poster about the pros and cons of spaying and neutering.
- Compare and contrast reproductive systems of species.
- Dissect an animal reproductive tract.

Academic Connections

ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):	**Sample Performance Task Aligned to the Academic Standard(s):**
English: 9-12 W.6 – Use technology, including the internet, to produce an individual writing product.	-After researching, use software to create an infographic explaining the difference between animal breeds.

INDICATOR #CA 2: **Evaluate an animal's diet to provide proper nutrition and optimal performance.**

SUB-INDICATOR 2.1 (Webb Level: 3 Strategic Thinking): Evaluate an animal's developmental stage to comprehend differences in nutrient requirements throughout the animal's life cycle.

SUB-INDICATOR 2.2 (Webb Level: 3 Strategic Thinking): Analyze a feed label/ration to determine whether it fulfills a given animal's nutrient requirements.

Knowledge (Factual):	**Understand (Conceptual):**	**Do (Application):**
-Nutrient classifications -Types of animal foods available -Animal development stages -How to read a feed label -Nutrient availability in animal foods	-How feedstuff quality affects animal performance -Nutritional requirements for animal species -Changes in nutritional needs per animal's life cycle	-Evaluate a feedstuff for nutrition -Analyze a feed label for nutritional quality -Categorize the different phases of an animal's lifestyle -Evaluate a diet to ensure all nutrients are needed

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Benchmarks:
Students will be assessed on their ability to:

- Balance a ration using a Pearson's Square.
- Experiment with food preferences with small animals.
- Create a fictional pet food to meet requirements of a given species.
- Write a research paper on a nutritional disease or toxicity.
- Produce a pet care guide book.

Academic Connections

ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):	**Sample Performance Task Aligned to the Academic Standard(s):**
English: 9-12 W.6 – Use technology, including the internet, to produce an individual writing product.	-After researching, use software to design a nutrition label for a fictional animal food product
Math: HSA.REI.C.6 - Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	-Balance a ration using a Pearson's square for small animals.

INDICATOR #CA 3: **Demonstrate techniques for optimal care of an animal.**

SUB-INDICATOR 3.1 (Webb Level: 3 Strategic Thinking): Recognize optimum performance for a given animal species.

SUB-INDICATOR 3.2 (Webb Level: 3 Strategic Thinking): Evaluate an animal's behavior to safely work with it.

SUB-INDICATOR 3.3 (Webb Level: 3 Strategic Thinking): Design a program to develop an animal to its highest potential.

Knowledge (Factual):	**Understand (Conceptual):**	**Do (Application):**
-Animal behaviors	-The importance of restraint	-Determine proper kennel, hutch, of facility for a given animal
-Breed standards	-Understand preventative medicine	-Compare and contrast animal uses
-Animal restraint equipment	-Diagnosis and prevention methods	-Perform safe handling procedures for given animal species
-Identify grooming techniques		
-Animal first-aid		

techniques -Diseases and parasites		-Groom an animal -Properly fit collars, halters, and restraining tack

Benchmarks:
Students will be assessed on their ability to:

- Classify dogs according to purpose.
- Design an animal facility.
- Build a shelter for an animal.

Academic Connections

ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):	**Sample Performance Task Aligned to the Academic Standard(s):**
English: 1) 9-12 W.6 – Use technology, including the internet, to produce an individual writing product.	-After researching, use software to create a brochure about animal parasites
2) 9-12 W.2 – Write to inform	-Write a blog discussing safe animal handling techniques
Math: HSG.CO.D.12 - Make formal geometric constructions with a variety of tools and methods	-Design and build an dog house using a variety of geometric shapes and methods.

INDICATOR #CA 4: **Develop employability skills related to the Animal Systems Pathway.**

SUB-INDICATOR 4.1 (Webb Level: 2 Skill/Concept): Develop soft skills to enhance employability.

Knowledge (Factual):	**Understand (Conceptual):**	**Do (Application):**
-Proper communication etiquette -Proper interview apparel -How to give a proper hand shake	-Importance of employability skills in careers -The dos and don'ts of job interviews	-Write e-mails to industry professionals

-How to tie a tie		

Benchmarks:
Students will be assessed on their ability to:

- Perform mock interview.
- Compose a cover letter and resume.
- Develop questions for an industry tour.

Academic Connections

ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):	**Sample Performance Task Aligned to the Academic Standard(s):**
English: 1) 9-12 SL.1 - Participate in collaborative discussion	-Interview professionals on a discussion panel
2) 9-12 W.2 – Write to inform/explain, to examine and convey complex ideas.	-Write a thank-you letter after an interview.

Additional Resources
Text: Small Animal Care and Management, Dean Warren
www.gaaged.org
www.yqca.org
www.igrow.org
Vet Science CDE