Animal Science

Evaluation Form

2025 Curricular Materials Review

# Publisher information

* Publisher Name:
* Title:
* ISBN #:
* Author:
* Copyright:
* Most Recently Published Edition and Website:
* Materials provided for evaluation:
* Intended Teacher Audience(s):
* Intended Student Audience(s):
* Is this curriculum in a digital format, print format, or both?

# Instruction

## Publishing Company

* Complete the curriculum evaluation form below. Please provide written justification as to how the material meets the criterion along with location references. If a justification requires additional space, please submit a response on an additional document.

## Review Team Member:

* Please use information and attachments to complete the curriculum evaluation form.
* Explain any discrepancies between your findings and the provided information.
* Findings, explanations, and comments should directly reflect the rubric.

Scoring for Alignment to Program Standards:

To evaluate each course’s materials for alignment to [**Animal Science**](https://cte.idaho.gov/wp-content/uploads/2023/04/animal-science-standards.pdf), analyze the materials against the relevant criteria in the tables below. Instructional materials must meet most criteria and metrics to align with program standards.

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| Standard for Animal Science is not evident. | There is some evidence of the Standard for Animal Science. | Materials explicitly align to and support the Standard for Animal Science through regular and authentic engagement opportunities for students. |  |

# CONTENT STANDARD CTE AS.1.0: Professional Organizations and Leadership

### Performance Standard CTE AS.1.1 Student Leadership in Career Technical Student Organizations (CTSO) and Professional Associations

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.1.1.1 Explore the role of professional organizations and/or associations in the animal science industry. | 0 1 2 N/A |  |
| 1. CTE AS.1.1.2 Define the value, role, and opportunities provided through career technical student organizations. | 0 1 2 N/A |  |
| 1. CTE AS.1.1.3 Engage in career exploration and leadership development. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.2.0: Idaho Animal Agriculture Industry

### Performance Standard CTE AS.2.1 Animal Agriculture Industries and Careers

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.2.1.1 Rank the importance of the animal production industries in Idaho. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.2 Compare the economic importance of animal production nationally and internationally. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.3 Identify career pathways within the animal science industry. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.4 Describe the educational requirements for a career pathway within the animal science industry. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.5 Describe working conditions for job titles within the animal science industry. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.6 Describe the value of certifications in the animal agriculture industry. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.7 Describe the purpose of maintaining supervised agriculture experience (SAE) record books. | 0 1 2 N/A |  |
| 1. CTE AS.2.1.8 Identify proficiency award areas related to an SAE program area. | 0 1 2 N/A |  |

### Performance Standard CTE AS.2.2 Agricultural Business, Marketing, Finance, and Risk Management

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.2.2.1 Describe value‐added concepts of marketing. | 0 1 2 N/A |  |
| 1. CTE AS.2.2.2 Describe current industry needs and goals for agriculture marketing. | 0 1 2 N/A |  |
| 1. CTE AS.2.2.3 Define risk management in livestock enterprises. | 0 1 2 N/A |  |

### Performance Standard CTE AS.2.3 Beef Industry

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.2.3.1 Determine the facility and equipment needs for beef production. | 0 1 2 N/A |  |
| 1. CTE AS.2.3.2 Compare types of beef production systems. | 0 1 2 N/A |  |
| 1. CTE AS.2.3.3 Compare grazing systems. | 0 1 2 N/A |  |
| 1. CTE AS.2.3.4 Describe land management practices and the importance of working relationships with land management agencies (e.g., Forest Service, Bureau of Land Management [BLM], private landowners). | 0 1 2 N/A |  |

### Performance Standard CTE AS.2.4 Dairy Industry

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.2.4.1 Describe elements of dairy production. | 0 1 2 N/A |  |
| 1. CTE AS.2.4.2 Determine the facility and equipment needs for dairy production. | 0 1 2 N/A |  |
| 1. CTE AS.2.4.3 Compare types of dairy production systems. | 0 1 2 N/A |  |
| 1. CTE AS.2.4.4 Compare milking systems. | 0 1 2 N/A |  |
| 1. CTE AS.2.4.5 Describe economically important dairy products. | 0 1 2 N/A |  |

### Performance Standard CTE AS.2.5 Other Food Animal Systems

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.2.5.1 Describe the elements of sheep and goat production. | 0 1 2 N/A |  |
| 1. CTE AS.2.5.2 Describe the elements of swine production. | 0 1 2 N/A |  |
| 1. CTE AS.2.5.3 Describe the elements of poultry production. | 0 1 2 N/A |  |
| 1. CTE AS.2.5.4 Describe the elements of aquaculture production. | 0 1 2 N/A |  |

### Performance Standard CTE AS.2.6 Equine Industry

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.2.6.1 Describe the elements of the equine industry | 0 1 2 N/A |  |
| 1. CTE AS.2.6.2 Describe basic equine anatomy, including the characteristics and function of the cecum. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.3.0: Nutritional requirements for livestock

### Performance Standard CTE AS.3.1 Digestive Systems of Domestic Animals

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.3.1.1 Compare the ruminant (e.g., cattle, sheep) and monogastric (e.g., swine, avian) digestive systems. | 0 1 2 N/A |  |
| 1. CTE AS.3.1.2 Describe the characteristics and function of a ruminant system. | 0 1 2 N/A |  |
| 1. CTE AS.3.1.3 Describe the functions of the small and large intestines. | 0 1 2 N/A |  |

### Performance Standard CTE AS.3.2 Livestock Feedstuffs

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.3.2.1 Identify feedstuffs by the nutrients they provide. | 0 1 2 N/A |  |
| 1. CTE AS.3.2.2 Identify the benefits of roughages, concentrates, supplements, and additives. | 0 1 2 N/A |  |
| 1. CTE AS.3.2.3 Evaluate the differences between good-quality feedstuffs and poor-quality feedstuffs. | 0 1 2 N/A |  |
| 1. Stan CTE AS.3.2.4 Describe how processing, storage, and feeding methods affect the quality of feedstuffs. | 0 1 2 N/A |  |

### Performance Standard CTE AS.3.3 Balanced Livestock Feed Rations

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.3.3.1 Identify methods of feed analysis (e.g., wet chemistry, near-infrared [NIR] spectroscopy). | 0 1 2 N/A |  |
| 1. CTE AS.3.3.2 Conduct a feed analysis. | 0 1 2 N/A |  |
| 1. CTE AS.3.3.3 Identify the steps in balancing rations. | 0 1 2 N/A |  |
| 1. CTE AS.3.3.4 Describe how nutritional information is used to develop animal rations at various physiological stages. | 0 1 2 N/A |  |
| 1. CTE AS.3.3.5 Develop balanced rations using the Pearson square ration formulation procedure. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.4.0: Livestock reproductive systems

### Performance Standard CTE AS.4.1 Reproductive Management of Domestic Animals

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.4.1.1 Identify the components and functions of the male and female reproductive structures. | 0 1 2 N/A |  |
| 1. CTE AS.4.1.2 Develop a breeding program (i.e., breeding plan) for livestock production. | 0 1 2 N/A |  |
| 1. CTE AS.4.1.3 Identify and interpret the signs of estrus in relation to the reproductive cycle. | 0 1 2 N/A |  |

### Performance Standard CTE AS.4.2 Natural and Artificial Animal Reproduction

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.4.2.1 Describe the effects of hormones on the reproduction cycle. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.2 Describe the stages of gestation leading to parturition. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.3 Describe common issues that could occur during the stages of gestation through parturition. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.4 Describe the process of artificial insemination in domestic livestock. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.5 Describe procedures for the collection, evaluation, and handling of semen. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.6 Describe the advantages and disadvantages of artificial insemination and natural breeding. | 0 1 2 N/A |  |
| 1. CTE AS.4.2.7 Describe the processes of estrous synchronization, semen sexing, embryo transfer, cloning, and genetic engineering. | 0 1 2 N/A |  |

### Performance Standard CTE AS.4.3 Lactation

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.4.3.1 Describe the lactation cycle and factors that affect milk production (e.g., genetics, disease, feed, environment, body condition, age, stress). | 0 1 2 N/A |  |
| 1. CTE AS.4.3.2 Describe the components of milk and colostrum and their roles in nourishing newborn livestock. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.5.0: Principles of Evaluation for Animal Selection

### Performance Standard CTE AS.5.1 Genetics

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.5.1.1 Describe Mendel’s basic principles of heredity. | 0 1 2 N/A |  |
| 1. CTE AS.5.1.2 Describe heritable traits and their effects on breeding. | 0 1 2 N/A |  |
| 1. CTE AS.5.1.3 Describe the principles of dominance and incomplete dominance. | 0 1 2 N/A |  |
| 1. CTE AS.5.1.4 Analyze heritability estimates as a selection factor in breeding programs. | 0 1 2 N/A |  |
| 1. CTE AS.5.1.5 Describe the relationship between genotype, environment, and phenotype. | 0 1 2 N/A |  |
| 1. CTE AS.5.1.6 Describe the advantages of crossbreeding and hybrid vigor in livestock production. | 0 1 2 N/A |  |

### Performance Standard CTE AS.5.2 Types and Conformation of Production Livestock

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.5.2.1 Describe the body condition scoring system among the different species. | 0 1 2 N/A |  |
| 1. CTE AS.5.2.2 Analyze performance data and expected progeny differences (EPD) when evaluating livestock. | 0 1 2 N/A |  |
| 1. CTE AS.5.2.3 Evaluate animal phenotypes (e.g., muscle mass, maternal traits, and frame size) according to current industry standards. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.6.0: Production livestock quality assurance

### Performance Standard CTE AS.6.1 Animal Behavior

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.6.1.1 Compare patterns of animal behavior. | 0 1 2 N/A |  |
| 1. CTE AS.6.1.2 Describe methods and benefits of animal behavior modification. | 0 1 2 N/A |  |
| 1. CTE AS.6.1.3 Describe the relationship between facilities and livestock behaviors. | 0 1 2 N/A |  |

### Performance Standard CTE AS.6.2 Animal Welfare Issues

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.6.2.1 Compare animal welfare and the concept of animal rights. | 0 1 2 N/A |  |
| 1. CTE AS.6.2.2 Identify controversial issues in animal usage (e.g., rodeo, circus). | 0 1 2 N/A |  |
| 1. CTE AS.6.2.3 Describe the effects of mass media on the public perception of livestock production. | 0 1 2 N/A |  |
| 1. CTE AS.6.2.4 Compare cultural differences and their impacts on animal usage (e.g., Halal, Kosher). | 0 1 2 N/A |  |
| 1. CTE AS.6.2.5 Describe legislation regarding animal usage and welfare (e.g., confinement, antibiotics, hormones). | 0 1 2 N/A |  |
| 1. CTE AS.6.2.6 Describe emerging trends in livestock production welfare. | 0 1 2 N/A |  |

### Performance Standard CTE AS.6.3 Quality Assurance Standards

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.6.3.1 Describe the importance of quality assurance standards for Idaho’s livestock industry. | 0 1 2 N/A |  |
| 1. CTE AS.6.3.2 Describe how quality assurance standards are administered. | 0 1 2 N/A |  |
| 1. CTE AS.6.3.3 Describe agencies and regulations that govern livestock production. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.7.0: Animal health and care

### Performance Standard CTE AS.7.1 Animal Health

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.7.1.1 Interpret the behavioral signs of healthy and unhealthy animals. | 0 1 2 N/A |  |
| 1. CTE AS.7.1.2 Describe the importance of controlling diseases and parasites in production livestock. | 0 1 2 N/A |  |
| 1. CTE AS.7.1.3 Identify how passive and active immunity can be enhanced by management. | 0 1 2 N/A |  |
| 1. CTE AS.7.1.4 Develop an animal health plan. | 0 1 2 N/A |  |
| 1. CTE AS.7.1.5 Describe the importance of maintaining accurate health records for production livestock. | 0 1 2 N/A |  |
| 1. CTE AS.7.1.6 Describe ways of identifying and tracking individual animals. | 0 1 2 N/A |  |

### Performance Standard CTE AS.7.2 Animal Diseases and Parasites

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.7.2.1 Compare viral, bacterial, fungal, and parasitic diseases. | 0 1 2 N/A |  |
| 1. CTE AS.7.2.2 Determine prevention and treatment methods for common reproductive diseases. | 0 1 2 N/A |  |
| 1. CTE AS.7.2.3 Describe the modes of transmission of infectious diseases. | 0 1 2 N/A |  |
| 1. CTE AS.7.2.4 Identify common internal and external parasites that affect production livestock. | 0 1 2 N/A |  |
| 1. CTE AS.7.2.5 Identify common reproductive diseases that affect production livestock. | 0 1 2 N/A |  |

### Performance Standard CTE AS.7.3 Disease Control and Management

| Student Competencies by Performance Standard | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. CTE AS.7.3.1 Describe the use of vaccines in disease control. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.2 Compare appropriate storage methods for medications. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.3 Describe methods to administer vaccines and pharmaceuticals. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.4 Identify methods to administer vaccines and pharmaceuticals. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.5 Describe the types of injections (e.g., subcutaneous, intramuscular, intravenous). | 0 1 2 N/A |  |
| 1. CTE AS.7.3.6 Determine the appropriate injection sites to administer vaccines and pharmaceuticals. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.7 Interpret labels and dosages found on animal medications. | 0 1 2 N/A |  |
| 1. CTE AS.7.3.8 Describe how cleanliness affects disease control. | 0 1 2 N/A |  |

# CONTENT STANDARD CTE AS.8.0: Animal Products and Processing

### Performance Standard CTE AS.8.1 Meat Animal Harvesting and Processing

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.8.1.1 Outline the major steps involved in the harvesting and processing of meat animals. | 0 1 2 N/A |  |
| 1. CTE AS.8.1.2 Identify the wholesale and retail cuts and by-products of meat animals. | 0 1 2 N/A |  |
| 1. CTE AS.8.1.3 Calculate dressing percentages. | 0 1 2 N/A |  |
| 1. CTE AS.8.1.4 Describe how yield grade and quality grade affect the value of the carcass. | 0 1 2 N/A |  |
| 1. CTE AS.8.1.5 Identify other animal product and processing industry segments in Idaho. | 0 1 2 N/A |  |

### Performance Standard CTE AS.8.2 Dairy Product Processing

| Student Competencies by Performance Standard | Meets Criteria | Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions in addition to page numbers. |
| --- | --- | --- |
| 1. CTE AS.8.2.1 Identify dairy quality control standards and requirements. | 0 1 2 N/A |  |
| 1. CTE AS.8.2.2 Identify dairy processing methods. | 0 1 2 N/A |  |

Scoring for Best Practices and Assessment

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of the teaching practice. | The teaching practice is embedded in some lessons. | Materials regularly embed supports for teachers to implement best practices and assessment. |  |

Scoring for Alignment to Best Practices and Assessment:

| Best Practices and Assessments | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. Materials contain clear statements and explanations of purpose, goals, and learning outcomes. | 0 1 2 N/A |  |
| 1. Materials are systematic and sequential – prerequisite skills taught first and vertically aligned appropriately. | 0 1 2 N/A |  |
| 1. Materials include formative and summative assessments and/or test data banks that allow the instructor to edit materials when appropriate. | 0 1 2 N/A |  |
| 1. Digital materials and assessments are easy to edit and revise and access to distribute and/or print. | 0 1 2 N/A |  |

Scoring for Additional Indicators of Quality Materials

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of differentiation elements or engaging tools. | There is some evidence of differentiation elements or engaging tools. | Materials include differentiation elements as well as engaging tools. |  |

Scoring for Alignment to Additional Indicators of Quality Materials:

| Indicators of Quality Materials | Meets Criteria | Justification or Comments |
| --- | --- | --- |
| 1. Materials provide instructional strategies to accommodate the learning differences of all students. | 0 1 2 N/A |  |
| 1. Materials are available in language(s) other than English. | 0 1 2 N/A |  |
| 1. The material has an aesthetically appealing appearance. | 0 1 2 N/A |  |
| 1. Digital and print materials are consistently formatted, visually focused, and uncluttered for efficient use. | 0 1 2 N/A |  |
| 1. The illustrations clearly cross-reference the text, are directly relevant to the content (not simply decorative), and promote thinking, discussion, and problem solving. | 0 1 2 N/A |  |

Scoring for Best Practices in the Use of Technology

| 0 Points  No Alignment | 1 Point  Partial Alignment | 2 Points  High Alignment | NA  Not Applicable |
| --- | --- | --- | --- |
| There is no evidence of best practices in using technology. | There is some evidence of best practices in using technology. | Materials include best practices in using technology. |  |

Use of Technology

| **Use of Technology** | **Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.** |
| --- | --- |
| 1. Technology and digital media support, extend, and enhance learning experiences. |  |
| 1. The material has “platform neutral” technology (i.e., cloud based) and availability for networking. |  |
| 1. The material has a user-friendly and interactive interface allowing the user to control (shift among activities). |  |

For Questions Contact

Content & Curriculum – Curricular Materials

Idaho Department of Education

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