

CASE Principles of Agricultural Science - Animal (2015)

AFNR: LifeKnowledge® and Cluster Skills Content Standards **CS**

- 1 Premier Leadership: Acquire the skills necessary to positively influence others.** **CS.01**

- 2 Personal Growth: Develop a skill set to enhance the positive evolution of the whole person.** **CS.02**

- 3 Career Success: Demonstrate those qualities, attributes and skills necessary to succeed in, or further prepare for, a chosen career while effectively contributing to society.** **CS.03**

- 4 Systems: Examine roles within teams, work units, departments, organizations, interorganizational systems, and the larger environment.** **CS.04**

- 5 Systems: Identify how key organizational structures and processes affect organizational performance and the quality of products and services.** **CS.05**

- 6 Examine the importance of health, safety, and environmental management systems in organizations and their importance to performance and regulatory compliance.** **CS.06**

- 7 Safety, Health, and Environmental: Demonstrate appropriate health and safety procedures for AFNR occupations.** **CS.07**

- 8 Technical Skills: Use tools, equipment, machinery and technology appropriate to work within areas related to AFNR.** **CS.08**

- 9 Technical Skills: Compare and contrast issues affecting the AFNR industry.** **CS.09**

- 10 Technical Skills: Envision emerging technology and globalization to project its influence on widespread markets.** **CS.10**

- 11 Scientific Inquiry: Utilize scientific inquiry as an investigative method.** **CS.11**

AFNR: Agribusiness Systems Career Pathway Content Standards **ABS**

- 1 Utilize economic principles to establish and manage an AFNR enterprise.** **ABS.01**

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- 2 Utilize appropriate management planning principles in AFNR business enterprises.** [ABS.02](#)
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- 3 Utilize record keeping to accomplish AFNR business objectives while complying with laws and regulations.** [ABS.03](#)
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- 4 Apply generally accepted accounting principles and skills to manage cash budgets, credit budgets and credit for AFNR businesses.** [ABS.04](#)
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- 5 Assess accomplishments of goals and objectives by an AFNR business.** [ABS.05](#)
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- 6 Use industry-accepted marketing principles to accomplish AFNR business objectives.** [ABS.06](#)
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- 7 Create a production system plan.** [ABS.07](#)
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**AFNR: Animal Systems
Career Pathway Content
Standards** [AS](#)

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- 1 Examine the components, historical development, global implications, and future trends of the animal systems industry.** [AS.01](#)
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- 2 Classify, evaluate, select, and manage animals based on anatomical and physiological characteristics.** [AS.02](#)
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- 3 Provide for the proper health care of animals.** [AS.03](#)
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- 4 Apply principles of animal nutrition to ensure the proper growth, development, reproduction, and economic production of animals.** [AS.04](#)
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- 5 Evaluate and select animals based on scientific principles of animal production.** [AS.05](#)
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- 6 Prepare and implement animal handling procedures for the safety of animals, producers, and consumers of animal products.** [AS.06](#)
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- 7 Select animal facilities and equipment that provide for the safe and efficient production, housing, and handling of animals.** [AS.07](#)
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- 8 Analyze environmental factors associated with animal production.** [AS.08](#)
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**AFNR: Biotechnology
Systems Career Pathway
Content Standards** [BS](#)

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- 1 Recognize the historical, social, cultural and potential applications of biotechnology.** [BS.01](#)
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- 2 Demonstrate laboratory skills as applied to biotechnology.** [BS.02](#)
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- 3 Demonstrate the application of biotechnology to Agriculture, Food, and Natural Resources (AFNR)..** [BS.03](#)
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**AFNR: Food Products
and Processing Systems**

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- 1 Examine components of the food industry and historical development of food products and processing.** [FPP.01](#)
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**Career Pathway Content
Standards** FPP

2 Apply safety principles, recommended equipment and facility management techniques to the food products and processing industry. FPP.02

3 Apply principles of science to the food products and processing industry. FPP.03

4 Select and process food products for storage, distribution and consumption. FPP.04

**AFNR: Natural Resources
Systems Career Pathway
Content Standards** NRS

1 Explain interrelationships between natural resources and humans necessary to conduct management activities in natural environments. NRS.01

2 Apply scientific principles to natural resource management activities. NRS.02

3 Apply knowledge of natural resources to production and processing industries. NRS.03

4 Demonstrate techniques used to protect natural resources. NRS.04

5 Use effective methods and venues to communicate natural resource processes to the public. NRS.05

**AFNR: Plant Systems
Career Pathway Content
Standards** PS

1 Apply knowledge of plant classification, plant anatomy and plant physiology to the production and management of plants. PS.01

2 Prepare and implement a plant management plan that addresses the influence of environmental factors, nutrients, and soil on plant growth. PS.02

3 Propagate, culture, and harvest plants. PS.03

4 Employ elements of design to enhance an environment. PS.04

**AFNR: Power, Structural
and Technical Systems
Career Pathway Content
Standards** PST

1 Use physical science principles and engineering applications with power, structural and technical systems to solve problems and improve performance. PST.01

2 Design, operate and maintain mechanical equipment, structures, biological systems, land treatment, power and technology. PST.02

3 Service and repair mechanical equipment and power systems. PST.03

4 Plan, build and maintain agricultural structures. PST.04

5 Apply technology principles in the use of agricultural technical systems. PST.05