



South Central College

# ANSC 1100 Livestock Production Principles

## Course Outcome Summary

### Course Information

<b>Description</b>	This course covers animal production history and economic impact, breed development, animal anatomy and physiology, animal production features, growth and lactation physiology, environmental animal production factors and animal research. This course also provides a comprehensive introduction to the fundamental principles of animal science based on biological and scientific aspects of animals that serve mankind. (3 lecture credits)
<b>Total Credits</b>	3
<b>Total Hours</b>	48

### Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

### Course Competencies

**1. Describe the U.S. livestock industry**

**Learning Objectives**

Outline animal domestication  
Explain livestock functions in society  
Understand affiliated livestock industries

**2. Explain nutrients and their sources**

**Learning Objectives**

Describe scientifically major classes of nutrients  
Explain digestion, metabolism, and nutrient absorption

**3. Explain livestock digestive systems**

**Learning Objectives**

Compare the ruminant digestive system with ration feedstuffs for ruminants  
Compare the non-ruminant digestive system with ration feedstuffs for non- ruminants, including poultry and horses

**4. Analyze feeder animal growth and carcass composition**

**Learning Objectives**

Describe approved feeder livestock practices  
Evaluate animal growth and composition

Calculate feeder animal profit margin  
Identify farm animal anatomical parts

**5. Describe livestock reactions to environmental stimuli**

**Learning Objectives**

Describe (select) animal adaptations to environments  
Explain and defend multiple approaches to animal health care  
Synthesize animal reaction and behavior  
Describe zoonosis, other livestock disease concerns, and biosecurity measures

**6. Illustrate management practices for livestock reproduction**

**Learning Objectives**

Identify critical nutrients and production practices for reproduction  
Outline lactation physiology through milk making and letdown process  
Describe colostrum immunological effects

**7. Summarize meat animal breeds, evaluation, and processing**

**Learning Objectives**

Identify major livestock breeds  
Overview animal evaluation for slaughter  
Relate meat processing with meat consumption

**8. Compare and contrast livestock species production systems**

**Learning Objectives**

Describe wool and fiber production systems  
Describe swine production systems  
Describe sheep production systems  
Describe the dairy production system  
Describe milk product handling and marketing industry  
Describe the equine industry  
Describe poultry and egg industry  
Describe specialty livestock trends

**9. Outline livestock production hazards**

**Learning Objectives**

Explain livestock hazards and corresponding safety measures

**SCC Accessibility Statement**

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: [www.southcentral.edu/disability](http://www.southcentral.edu/disability)

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