



South Central College

ANSC 2100 Principles of Animal Nutrition

Course Outcome Summary

Course Information

Description	This course provides information about the fundamentals of nutrition and the essential nutritional requirements of livestock. Units of instruction will include: nutrients and digestion, evaluating feedstuffs, characteristics of feedstuffs, processing techniques of various feeds, feeds formulations, commercial feeds and feed additives. This course includes the discussion of the feeding practices of swine, cattle poultry and equine. Students will also learn the basics of formulating rations for livestock.
Total Credits	3
Total Hours	48

Types of Instruction

Instruction Type	Credits/Hours
Classroom Presentation	

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. Define the nutrient needs of livestock**
- 2. Explain the differences in the six basic nutrient groups**
- 3. Identify parts and functions of animal digestive systems**
- 4. Compare differences & similarities of digestive systems**
- 5. Explain feedstuff digestion and nutrient absorption**
- 6. Discuss the various analytical methods used to determine the nutrient composition of feedstuffs**
- 7. Explain how feedstuffs should be collected for analysis and how nutrient composition is reported**
- 8. Describe procedures in determining the apparent digestibility of feedstuffs**

9. Describe the various energy measurements and explain their usage in diet formulations or evaluations
10. Describe how feeds can be physically and economically evaluated
11. Describe feedstuffs nomenclature and explain how the table of feed composition is used
12. Classify feeds into the various categories: concentrate feeds, roughage feeds, additives
13. Identify various feeds by nutrient content
14. Identify various desirable & undesirable characteristics of feeds
15. Discuss how the stage of plant maturity influences nutritional value to the animal
16. Identify important factors regulating feed intake by animals
17. Discuss harvesting, storing and processing techniques available for various feeds
18. Examine feeding standard tables for various livestock
19. Perform mathematical solutions to animal diet formulation
20. Describe the overall scope of the commercial feed industry
21. Explain the feed manufacturing laws, rules and regulations
22. Explain label format as to what has to be included on a label & how this format is interpreted
23. Describe the different types of feed additives used in livestock production
24. Identify which feed additives are used for particular purposes and with which animal
25. Identify implant products
26. Participate in an evaluation of your Career Planning Application at the State PAS Conference
27. Accept responsibility for preparing and attending class
28. Display professional demeanor
29. Compare the differences between the ruminant, non-ruminant and avian digestive systems
30. Explain the differences between the six basic nutrients
31. Describe the various feed stuffs and their nutrient composition
32. Formulate animal rations using the square method

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

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