

**AG 240-- PRINCIPLES OF ANIMAL NUTRITION  
WINTER 2007**

Lecture 10:10-11:05 M, W, F  
710 Berndt Hall

Laboratory - 9-12 am Thurs  
710 Berndt Hall

Instructor - Beth LaShell  
730 Berndt Hall  
247-7189 or lashell\_b@fortlewis.edu

Office Hours - 7:30-9:30 MWF  
or by appointment

Required Text: Animal Feeds, Feeding and Nutrition, And Ration Evaluation by David Tisch

Optional Text Livestock Feeds and Feeding (5th ed.) by Kellems and Church  
Animal Feeding and Nutrition by Jurgens

**Course Objective -** Develop a basic understanding of animal nutrition as it relates to anatomy, nutrients, and feedstuffs. With this understanding, one can develop ration balancing skills and general livestock feeding guidelines.

**Lecture Outline -**

<u>Topics</u>	<u>Text Reading</u>
Course Introduction	
Digestive Tract Anatomy	Ch. 2 and Lectures
Microbial Fermentation	Lectures
Nutrients	Ch. 6-11 and lectures
CHO-6; Protein -7; Fats-8; Vitamins-9; Minerals- 10; Water - 11	
Evaluation of feedstuffs	Ch. 3 & 4
Energy Systems	Ch 5
Concentrates/High energy	Ch. 6
Protein sources	Ch. 7
Vitamin and Mineral supplements	Ch. 9-10
Feed additives, preparation and processing	Ch. 3 & 13
Ration Formulation	Ch. 12
Livestock Feeding Guidelines	
Cattle (16-18), Sheep ( 20-21) Goats (22-23), Swine (14-15), Poultry (26-27), Horses (24-25)	

**Laboratory Topics/Activities -**

Anatomy of ruminant and non-ruminant digestive tracts  
Feed terminology, identification and classification  
Laboratory analysis of feedstuff  
Livestock ration formulation  
Computer applications for Animal Nutrition  
Practical application of nutrition principles (field trips)

**Grading**

Three (100 point) 1-hour exams	300
Note: Last exam will be during Finals Scheduled time	
Six (20 point) quizzes in lecture and lab ( <b>drop lowest quiz</b> )	100
Laboratory	
Attendance and participation	100
Worksheets and homework (lecture and lab)	<u>150</u>
<b>TOTAL POINTS</b>	<b>650</b>

A= > 94% B= 85-93% C= 75-84% D= 65-75% F= < 65%

**Class Policies:**

- **There will be no makeup quizzes.**
- **Exams can only be made up if arrangements have been made prior to day of test.**
- **You are expected to remain current on your reading and hand in assignments on time (points will be deducted for late homework)**

NAME \_\_\_\_\_

FLC ADDRESS \_\_\_\_\_  
\_\_\_\_\_

PHONE \_\_\_\_\_

YEAR IN SCHOOL \_\_\_\_\_ MAJOR \_\_\_\_\_

HOME STATE \_\_\_\_\_

What species of livestock are you interested in?

\_\_\_\_\_ Cattle      \_\_\_\_\_ Sheep      \_\_\_\_\_ Horses  
\_\_\_\_\_ Pigs      \_\_\_\_\_ Poultry      \_\_\_\_\_ Other (please list)

How would you describe your Computer/Internet experience?

\_\_\_\_\_ None      \_\_\_\_\_ Some      \_\_\_\_\_ A fair amount      \_\_\_\_\_ Extensive

Which of the following courses that you have taken:

\_\_\_\_\_ Ag 101- Intro to Animal Science

\_\_\_\_\_ College algebra

\_\_\_\_\_ Chemistry

\_\_\_\_\_ Crops

\_\_\_\_\_ Forages

List any other courses that may be related to Animal Nutrition: