

COURSE INFORMATION FORM

ASI 318

Dept. abbreviation and course number

COLLEGE of AGRICULTURE, KANSAS STATE UNIVERSITY

Course Title:

Fundamentals of Nutrition. (3) I, II.

Course Description:

Elementary principles of comparative nutrition of farm animals. Three hours lec. a week.
Pr.: CHM 100. ASI-318-0-0104.

Student Performance Objectives:

Students should be able to:

1. Develop an understand of the terminology.
2. Understand basic principles involved in digestion, absorption, metabolism and excretion of nutrients and feed additives.
3. Understand the metabolic interactions of nutrients and the metabolic effects of nutrient deficiencies.
4. Have an appreciation of mechanisms of bioenergetics and associated energy systems.
5. Evaluate the nutritional status of farm animals.

Instructor:

Joe Hancock and Brad Johnson

Course Outline:

A list of topics presented in the course:

- I. Nutrition and its Importance in our Modern Agriculture.
- II. Common Methods of Analysis for Nutrients and Feedstuffs.
- III. The Gastrointestinal Tract-Anatomy, Digestion, and Absorption in Ruminant and Nonruminant Species.
- IV. Measurement of Nutrient Utilization and Requirements of Animals.
- V. The Digestion and Metabolism of the Required Nutrients and their deficiency symptoms.
- VI. Nonnutritive Feed Additives and Growth Stimulators.

Evaluation Procedures:

Course grade is derived from an average of three or four one-hour examinations given throughout the semester and the final examination. Letter grades are earned and are as follows: A=90+, B=80-89, C=70-79, D=60-69. Multiple sessions taught by different instructors may not use the same grading scale.

Text and Reference Material:**Sequencing:****Supplemental Information:**

The organized lectures make use of extensive visual aids. Slides and preserved specimens illustrate the compartments of the monogastric and ruminant digestive system. Supplemental handouts are used occasionally.