ANIMAL SCIENCE 2020

Feeds and Feeding

Spring Semester 2012
Lecture: TR 11:00 – 12:15
Labs: W 3:10 – 5:00
AS/MB Rm 104

INSTRUCTOR:

Dr. Paul Ludden

Office: AB 123B; 766 – 4213
Cell: 760 – 2514 (No calls after 9:00 PM)
Email: ludden@uwyo.edu

TEACHING ASSISTANT:

Kaitlyn Sullivan

Email: ksulli17@uwyo.edu

OFFICE HOURS:

Students are always welcome to seek the instructor's assistance on any aspect of the course. Although formal office hours will not be held, I will generally be available at any time I am in my office. Email and/or phone communication with the instructor is also welcome. If extensive assistance is required, an appointment with the instructor is recommended.

COURSE OBJECTIVE:

Animal Science 2020 is designed to provide students with a basic overview of nutritional concepts and their application to making feeding and management decisions for livestock production. Topics include nutrients and their utilization, feedstuff composition and identification, and the application of ration balancing principles to meet animal requirements for various production goals throughout the life cycle of the animal. **This course is math-intensive**, and will require knowledge and routine application of algebra and use of a calculator. Laboratory activities will focus on practical application of principles covered in lecture, with focus on feeding practices specific to the important domestic livestock species.

TEXTBOOK:

The following textbook is REQUIRED for this course, and may be purchased from the University Bookstore ($144.90 new; $101.40 used; $56.85 e-book). Supporting reference material may be provided as handouts in class.

Livestock Feeding and Nutrition. 6th Ed. (2010; R. O. Kellems and D. C. Church)
ISBN: 978-0-13-159475-3

COURSE STUDIO HOMEPAGE:

A Course Studio Homepage has been created for the course, and is available through your WYOWEB account. This homepage will be used for posting of lecture/lab notes (PPT slides), as well as lab assignments and study questions along with their associated answer keys. Please note that all such postings will occur after the lecture/lab and should be used as a supplement to normal note-taking, etc. You may also receive occasional course announcements via this homepage. Contact the instructor if you need help accessing the Course Studio Homepage for the course.

GRADING:

LABORATORY ASSIGNMENTS: (300 pts)

Laboratory assignments (20 pts ea) will be given in each of the 15 laboratory meetings. These problem sets will focus on information retrieved from the textbook or other resources and associated calculations (i.e. ration balancing, etc.). For most lab assignments, group work is acceptable unless announced otherwise in class. You must show all work on problem sets to receive full credit. **Lab assignments will be due before leaving lab that day.** Lab assignments turned in late will be penalized 10 pts for each class period the assignment is late. Thus, lab assignments turned in after the 2nd class meeting following the date of the assignment (i.e. the Tuesday lecture of the following week) will receive zero points.

EXAMINATIONS: (500 pts)

Five mid-term exams (100 pts ea) will be given. Exams may consist of any combination of multiple choice, matching, fill-in-the-blank, definition, identification, and short answer questions (including questions requiring extensive calculation). Although exams will be non-comprehensive and include material covered in both lecture and laboratory, by nature exams may require knowledge of information covered earlier in the semester. Mid-term exams are tentatively scheduled during the normal lecture meeting on **January 26, February 16, March 8, April 5 and May 1 (Finals week).**

During the week prior to each exam, a series of Study Questions will be handed out to assist in preparation for the exam. Completing these study questions is OPTIONAL. However, you may turn in your answers and earn up 20 points for each set of study questions (100 pts total). The total points earned on **study questions may then be used to replace your lowest exam score**. Thus, with proper planning and performance, Exam #5 (Final) could be considered "optional" if used as the dropped exam! Study questions will be due promptly at the beginning of the class period on the day of the scheduled exam, except that the final set of study questions will be due to the instructor before the end of the last laboratory meeting (April 25). Study questions turned in late will not be accepted!

CLASS PARTICIPATION: (50 pts)

This is the easiest way to earn points in the course. Class attendance and active participation in class discussion are an integral part of this course, and are required for full participation credit. Come to each class prepared to actively participate in each lecture and earn easy points for your efforts.

GRADING SUMMARY:

TOTAL POINTS:

Graded Item	Points
Exams	500
Lab Assignments	300
Class Participation	50
Total	850

Grade*	%	Pts Needed
A	90%	≥ 765
B	80%	680 – 764
C	70%	595 – 679
D	60%	510 – 594
F	< 60%	< 510

*****Minimum percentage grade/points required for each letter grade may be lowered (but will not be raised) at the discretion of the instructor.

MAKE-UP POLICY:

Make-up exams will be given ONLY upon proof (in writing) of a justifiable absence and at the discretion of the instructor, and will only be considered with an official University Authorized Absence Form (i.e. Yellow Slip) issued by the Dean of Students Office. Unless the absence is due to an emergency, students MUST notify the instructor before the absence such that appropriate make-up arrangements can be made. All make-up exams must be completed before the second class period following the scheduled exam to facilitate handing them back to the class in a timely fashion. Late laboratory assignments may be accepted, but will be penalized accordingly (see Laboratory Assignments section above). Late study questions will not be accepted under any circumstances.

USE OF ELECTRONIC DEVICES DURING CLASS TIME:

Although cell phones/smartphones, etc. are an important part of our daily lives, they also represent a significant distraction to the learning environment of the classroom. Consequently, all use of any such devices must cease (turned off or placed on vibrate/silent) upon the start of each lecture/lab or exam. If necessary to immediately respond to a call, text message, etc., students are asked (or will be asked) to discretely leave the classroom or wait until the lecture/lab period is over to do so. In the event of a University emergency (i.e. UW-ALERT activation), the instructor will notify the class accordingly. VIOLATIONS OF THIS POLICY WILL NOT BE TOLERATED! If necessary to do so, you may use your cell phone/smartphone as a calculator in laboratory or lecture activities, but this will NOT be allowed under any circumstances on exams.

ACADEMIC DISHONESTY:

The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the University community have a responsibility to be honest and the right to expect honesty from others. An act is academically dishonest when, and only when, it is an act attempted or performed in order to misrepresent one's involvement in an academic task in any way. Any form of academic dishonesty is unacceptable to our community and WILL NOT BE TOLERATED in this course. Likewise, you should not be expected to tolerate academic dishonesty by your fellow classmates. Suspected violations of standards of academic honesty should be immediately reported to the Instructor, Department Head, or Dean. Any student suspected of academic dishonesty will be dealt with appropriately and promptly, which may include immediate dismissal from the course with a failing grade and prosecution to the fullest extent of University policy. For more information regarding policies on academic dishonesty at the University of Wyoming, please refer to UW Regulation 6-802 or the General Bulletin.

DISABILITY STATEMENT:

If you have a physical, learning, or psychological disability and require accommodations, please let the instructor know as soon as possible. You are encouraged to contact University Disability Support Services (Rm 330 Knight Hall) for assistance. Students in the College of Agriculture and Natural Resources may also seek the assistance of the Office of Student Success (Rm 139 Ag C) through the College's Academic and Student Programs Office (Rm 160 Ag C).

TENTATIVE COURSE SCHEDULE:

		Lecture Topic	*Laboratory Topic*
Jan	10	Review Syllabus/Intro to Nutrition	
	11		Feed Composition and Analysis
	12	Classes of Nutrients	
	17	Classes of Nutrients	
	18		Classes of Feedstuffs/Feed ID
	19	Classes of Nutrients	
	24	Classes of Nutrients	
	25		Feed Processing
	26	**Exam #1**	
	31	Digestive Systems	
Feb	1		Digestive Anatomy
	2	Nutrient Digestion	
	7	Nutrient Digestion	
	8		Nutrient Digestion
	9	Energy Systems	
	14	Metabolizable Protein System	
	15		Energy/Metabolizable Protein
	16	**Exam #2**	
	21	Nutrient Requirements of Livestock	
	22		Ration Balancing Techniques
	23	Physiological Phases of Production	
	28	Physiological Phases of Production	
	29		Ration Balancing Techniques
Mar	1	Feed Additives	
	6	Feed Tags/Feed Regulations	
	7		Ration Balancing Techniques
	8	**Exam #3**	
	13-15	NO CLASS – SPRING BREAK	NO LAB – SPRING BREAK
	20	Swine Feeding Practices	
	21		Swine Feeding Practices
	22	Swine Feeding Practices	
	27	Poultry Feeding Practices	
	28		Poultry Feeding Practices
	29	Horse Feeding Practices	
Apr	3	Horse Feeding Practices	
	4		Horse Feeding Practices
	5	**Exam #4**	
	10	Beef Cattle Feeding Practices	
	11		Beef Cattle Feeding Practices
	12	Beef Cattle Feeding Practices	
	17	Dairy Cattle Feeding Practices	
	18		Dairy Cattle Feeding Practices
	19	Dairy Cattle Feeding Practices	
	24	Sheep Feeding Practices	
	25		Sheep Feeding Practices
	26	Sheep Feeding Practices	
May	1	**Exam #5** (Finals Week - Tuesday 10:15 – 12:15)	