# **ANIMAL SCIENCE 3100**

Principles of Animal Nutrition MWF 10:00 – 10:50 AS/MB 103

## **COURSE OBJECTIVE:**

Students in Animal Science 3100 will be introduced to the principles of animal nutrition. The course will stress an appreciation for the definition and function of the basic classes of nutrients, and their comparative digestion, absorption, and metabolism in common livestock species, with application to human nutrition.

#### INSTRUCTOR:

NAME: Dr. Paul Ludden

OFFICE: AB 123B

PHONE: Office: 766 – 4213; Cell: 760 – 2514 (No calls after 9:00 PM)

EMAIL: <u>ludden@uwyo.edu</u>

## **OFFICE HOURS:**

Students are always welcome and encouraged to seek the instructor's assistance on any aspect of the course. Although I do not hold office hours per se, I will generally be available at **any time I am in my office** (usually 8:00 - 5:00 weekdays). If other meeting times or extensive assistance is required (i.e. 30 min or more), students are encouraged to make an appointment with the instructor or seek help from one of the teaching assistants.

### **TEACHING ASSISTANTS:**

NAME: Kristina Maddocks Lindsey Hankins
EMAIL: kmaddock@uwyo.edu lhankins@uwyo.edu

#### **TEXTBOOK:**

No single textbook will cover the course in its entirety, and material for the course will be drawn from several sources. Therefore, there is **no required text** for Animal Science 3100. Handouts of important information will be given throughout the semester (usually at the start of each section). However, if you feel the need for supplemental information, you may temporarily check out a variety of textbooks, etc. from the instructor. If you are interested in purchasing a text, <u>Animal Nutrition</u> by P. McDonald et al. (6<sup>th</sup> Edition, 2002, ISBN: 0582419069; or 7<sup>th</sup> Edition, 2011, ISBN: 978-1408204238) is suggested as an excellent reference for the course.

## **GRADING:**

#### WEEKLY QUIZZES (100 total pts):

Quizzes (11 quizzes @ 10 pts each) will be given weekly (usually on Wednesdays) throughout the semester, except during the week of an exam. Quizzes will emphasize the material covered in the most recent lectures (since the last quiz or exam) and are designed to prepare students for the subsequent exam. Therefore, quizzes will typically cover lecture material in greater depth than required on exams, and by nature may be more challenging than the exams. Quizzes will be given promptly at the start of the class period, and should typically take no more than 15 minutes. The correct answers to the quiz will be discussed in class immediately after the completion of each quiz; therefore, no make-up quizzes will be given (except for students with University-approved absences; see make-up policy below). However, each student's one (1) lowest quiz score will be dropped, such that 100 total points can be earned on quizzes.

### MID-TERM EXAMS (300 total pts):

Three in-class mid-term exams (100 pts each; 300 pts total) will be given on **Wednesday Sept 21**, **Wednesday Oct 19**, and **Friday Nov 18** at the normally scheduled class time. Note that most students **will require the full class period or longer** to complete these exams, and that accommodations will be made for those students with class scheduling conflicts as necessary (please let the instructor know of any such conflicts ahead of time). Students are also encouraged to attend the optional review sessions held from 7:00 – 9:00 PM on the evening before each exam as indicated in the tentative schedule (pg 4).

#### PARTICIPATION (40 total pts):

Students are expected to attend and actively participate in each lecture by asking/answering questions, etc.. Consequently, up to 40 participation points will be awarded. **Class attendance** plays a big role in determining the bulk of participation points. Excused absences will only be considered with an official University Authorized Absence Form (i.e. Yellow Slip) issued by the Dean of Students Office. To encourage participation in lecture "**Learning Exercises**" may be given at any time throughout the semester. Learning exercises will usually consist of a written answer to a short question just covered in lecture. Students may work in small groups (up to 5 students), and will be free to use any text or course notes to complete each exercise (i.e. "open book"). Although Learning Exercises will not be graded, answers (either individually or as a group) will be turned in to the instructor to assess understanding of the concepts presented and to monitor attendance.

## STUDY QUESTIONS (40 total pts):

Students are required to submit five (5) potential exam questions one week before each exam. Study questions will be worth a maximum of 2 pts each for a total of 10 pts for each exam (including the final), for a total of up to 40 points for the course. Submitted questions will be compiled, along with supplemental questions as needed, and distributed to the entire class for use as a study guide for the exam. **Submitted questions should be in the form of complete questions, be statements of specific ideas, and include the appropriate answer to the question.** Therefore, questions must be short answer/essay-style and require more than a one or two word answer. True/false, fill-in-the-blank, and multiple-choice questions will NOT be accepted, and will receive 0 pts each. Submitted questions will be graded as follows:

- 2 pts for well written, informative questions
- 1 point for poorly written/designed questions, or incorrect answers
- 0 points for each unacceptable question/answer

Please submit study questions via email to the instructor at <a href="ludden@uwyo.edu">ludden@uwyo.edu</a>. For editing purposes, please type (or copy and paste from a word processor) the questions in the text of the email, rather than as an attachment. Please put the questions at the beginning of the email, and include the answers to the questions at the end of the email (not after each question). Failure to adhere to these formatting guidelines when submitting study questions will result in an automatic deduction of 2 pts. Study questions must be received via email before 5:00 PM on the day they are due. A reply email will be sent as a confirmation receipt for your questions – if you do not receive a reply email within 2 hours of submission, contact the instructor as soon as possible. You will also receive a printed copy of your submitted questions once they are graded. Late submissions may be considered at the discretion of the instructor, with 5 pts deducted for each day (or part thereof) the submission is late.

## **FINAL EXAM:**

Students will have TWO OPTIONS with regard to the final exam.

**OPTION # 1:** Students can elect NOT to take the Final Exam, but include their **average quiz score** (% grade on quizzes after dropping the low quiz) as their score for the Final Exam. For example, if your average quiz score were a 7.5/10 (75%), then a score of 150/200 pts would be recorded as your Final Exam score if you elect this option.

**OPTION # 2:** Students can complete the **comprehensive 200 pt Final Exam** on **Monday December 5** from 10:15 – 12:15 PM as outlined in the Fall 2011 Class Schedule. Approximately 85-90% of the Final Exam will consist of material covered since the start of the semester (i.e. comprehensive), with the remaining 10-15% focusing on material covered after Exam #3 (i.e. water and energy). Note that taking the Final Exam can either raise or lower your final grade in the course.

To assist students in selecting one of the above options, a Pre-Final grade report will be handed out in class on the last day of the semester (Friday December 2). The Pre-Final grade report will include the final grade earned for the course if Option #1 above is chosen, and a calculation of the score needed on the Final Exam for each attainable letter grade if Option #2 above is chosen. All students will be required to select one of the above options, sign, and return their grade reports to the instructor before the end of class that day. Failure to turn in a signed grade report (i.e. by choice or failure to attend class that day) will be interpreted as a choice for Option #2 above, and you will be REQUIRED to take the Comprehensive Final.

## **TOTAL POINTS and GRADE RANGES:**

Graded Item	Points Possible	Letter Grade	Minimum Points Required*
Weekly Quizzes	100	A	612 (90%)
Mid-Term Exams	300	В	544 (80%)
Final Exam	200	C**	476 (70%)
Study Questions	40	D	408 (60%)
Participation	40	F	Below 408
Total	680		

<sup>\*</sup>Minimum points required may be lowered (but will not be raised) at the discretion of the instructor.

## **MAKE-UP POLICY:**

NO make-up quizzes will be given, except for students with University-approved absences (i.e. Judging teams, University athletics, Rodeo, etc.). In those cases, special arrangements must be made with the instructor before the absence to schedule make-up quizzes. 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. Every effort must be made to schedule and complete any make-ups before the subsequent class period following the scheduled exam/quiz, so that they may be handed back to the class in a timely fashion. It is the responsibility of the student to schedule a make-up—failure to arrange for a make-up will result in no grade (0 pts) for that exam or quiz.

### **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. Teachers and students should report suspected violations of standards of academic honesty 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.

## **USE OF ELECTRONIC DEVICES DURING CLASS TIME:**

Although cell phones, smartphones/Blackberrys, iPods/MP3 players, etc. have become an increasingly 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. activation of the UW-ALERT system), the instructor will notify the class accordingly. VIOLATIONS OF THIS POLICY WILL NOT BE TOLERATED!

## **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 (UDSS; room 330 Knight Hall) for assistance. Students in the College of Agriculture may also seek the assistance of the Office of Student Success (Teresa Jacobs, Counselor; Rm 139 Ag C) through the College's Academic and Student Programs Office (Rm 160 Ag C).

<sup>\*\*</sup>If you are an ANVS major or minor, you must earn a grade of C or higher in this course to receive credit toward your degree.

# **COURSE SCHEDULE:**

<u>Date</u>		Topic	Scheduled Event
Aug	22	Introductions/Review Syllabus	
	24	Intro to nutrition	
	26	Intro to nutrition/Digestive Anatomy	
	29	Digestive anatomy	<b>-</b>
	31	Digestive anatomy	Quiz #1
Sept	2	Digestive anatomy	
	5	NO CLASS – Labor Day	
	7	Carbohydrates	Quiz #2
	9	Carbohydrates	
	12 14	Carbohydrates	Quiz #2: Study Questions Due
	16	Carbohydrates Carbohydrates	Quiz #3; Study Questions Due
	19	Carbohydrates	
	20	Review Session (7:00 – 9:00 PM; AS/MB 103)	
	20 <b>21</b>	Review Session (7.00 - 9.00 PM, AS/MB 103)	Exam #1
	23	Lipids	
	26	Lipids	
	28	Lipids	Quiz #4
	30	Lipids	
Oct	3	Lipids	
	5	Protein	Quiz #5
	7	Protein	
	10	Protein	
	12	Protein	Quiz #6; Study Questions Due
	14	Protein	
_	17	Protein	
	18	Review Session (7:00 – 9:00 PM; AS/MB 103)	
	19		Exam #2
	21	Vitamins	
	24 26	Vitamins Vitamins	Quiz #7
	28	Vitamins	Quiz #1
	30	Vitamins	
Nov			Ouiz #0
Nov	2 4	Vitamins Minerals	Quiz #8
	6	Minerals	
	9	Minerals	Quiz #9
	11	Minerals	Study Questions Due
	13	Minerals	,
	16	Minerals	Quiz #10
	17	Review Session (7:00 – 9:00 PM; AS/MB 103)	
	18		Exam #3
	21	Water	
	23	NO CLASS – Thanksgiving Break	
	25	NO CLASS – Thanksgiving Break	
	28	Water/Energy	Onia Hada Otrada Oraca Cara B
_	30	Energy	Quiz #11; Study Questions Due
Dec	2	Course Wrap-up/Evaluations	
	_	Review Session (To be arranged, as needed)	
	5		FINAL EXAM - 10:15-12:15