

Welcome to Animal Science 322 – Applied Livestock Nutrition and Feeding

Class Times	MWF 10:00 – 10:50 AM Lab: T 8-9:50 or 10:00 – 11:50
Room	Lecture: KH 152 Lab: KH 306
Instructor	Dr. Keela Trennepohl
Zoom Link	https://wiu.zoom.us/j/95844641516
Office	KH 315
Cell Phone	805-440-8421
Email	km-trennepohl@wiu.edu
Office Hours	M 11 - 1; T 1 – 2; W 11-12
Final Exam	Monday, December 12 th 10:00 AM – 11:50 AM

COURSE DESCRIPTION

Composition of feed/nutrients and their functions, formulating/balancing rations, and basic chemical and physiological principles of ruminant and non-ruminant nutrition. Consideration of common nutrition problems, feed additives and growth stimulants.

COURSE LEARNING OBJECTIVES

- Articulate the nutrients in animal nutrition and explain their role in meeting animals' requirements
- Explore the major components of the gastrointestinal tract of animals and explain their function in providing nutrients to the host animal.
- Compute the solutions to rudimentary dietary formulation problems
- Compare and contrast the allocation and utilization of various feedstuffs among animals based on the digestive strategies in animals.
- Communicate effectively in a professional matter, using clear writing skills.

COURSE TEXT and OTHER MATERIALS

- Recommended texts: *Principles of Companion Animal Nutrition*, McNamara 2014 and *Livestock Feed and Feeding 6th edition*, Kellems and Church 2010
- The class will use Western Online for distribution of course materials. Outlines and/or PowerPoint Presentations for class will be posted on this page in Adobe Acrobat (*.pdf) format. Most notes will be hand written on board.

COURSE EXPECTATIONS

This syllabus is subjective to change and the course progresses.

In this course, I expect you to expand upon your basic animal knowledge and to critically examine aspects of animal nutrition with which you are not already familiar. In the end, you will be able to explain the basics of the animal nutrition industry as it relates to livestock production.

COURSE POLICIES AND PROCEDURES

I expect you to attend every class on time and be ready to effectively contribute. In order to help prepare you for post-graduation responsibility, I will not accept late assignments or provide make-up tests, homework, quizzes, projects, or etc. A lecture exam exception may be made only with University-recognized emergency (instructor must be notified within 24 hours of exam date and time) or official school business if instructor is notified at least one week in advance. In order to provide course accessibility, lecture material will be distributed on Western Online. Please make it your responsibility to check Western Online before each lecture for any updates that may occur. There may be times when assignments or quizzes are presented online or in class without prior notice. This is to insure your attendance in lecture and ensure that you are taking responsibility for your learning in the course. If you choose to miss class or forget to check the course Western Online which results in missed graded points, you will not be given an alternative assignment. If an extended absence or an excused absence is necessary, course material you have missed is your responsibility. Course will be livestreamed via zoom, recorded and posted to Western Online. Students who miss class will be held to the same deadlines as those in class. For assignments turned due in class, students not present in class will be required to turn those assignments in online the general assignment folder unless a specific folder is assigned on Western Online.

Attendance will be taken on occasion in lecture. Each unexcused absence will result in a ten point reduction in overall final score in the course.

Students with disabilities: In accordance with University values and disability law, students with disabilities may request academic accommodations where there are aspects of a course that result in barriers to inclusion or accurate assessment of achievement. To file an official request for disability-related accommodations, please contact the Disability Resource Center at 309-298-2512, disability@wiu.edu or in 143 Memorial Hall. Please notify the instructor as soon as possible to ensure that this course is accessible to you in a timely manner.

Maintaining high ethical standards is of utmost importance, not only for this class, but as a student, in a professional career, and in your personal life. I expect everyone in this class to uphold Code of Student Conduct in Student Handbook and be familiar with all applicable policies including but not limited to academic dishonesty and disruptive behavior. Any breach of this code will result in, at minimum, a failing grade for the course. To access the Policy, please visit <http://www.wiu.edu/policies/acintegrity.php> In addition, students have certain rights and responsibilities to be aware of as seen online at: <http://www.wiu.edu/provost/students.php>. Tobacco use of any form is not allowed

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during class and texting is prohibited. **No animals except for service animals are allowed in lecture class or lab.**

University values, Title IX, and other federal and state laws prohibit sex discrimination, including sexual assault/misconduct, dating/domestic violence, and stalking. If you, or someone you know, has been the victim of any of these offenses, we encourage you to report this to the Title IX Coordinator at 309-298-1977 or anonymously online at: http://www.wiu.edu/equal_opportunity_and_access/request_form/index.php. If you disclose an incident to a faculty member, the faculty member must notify the Title IX Coordinator. The complete Title IX policy is available at: <http://www.wiu.edu/vpas/policies/titleIX.php>.

Students should have coverage for major medical, surgical and emergency expenses, either through their parents/guardians, or a personal health insurance policy. WIU Health Services provides outpatient medical attention to all students; additional health services are available at a low cost.

Attention Education Majors:

The changes within the state teaching license require all education majors to receive a grade of a "C-" or better in this course in order to meet these new requirements. With the university +/- grading system, receiving a "D+" or below will require you to retake this course or find a substitute course to meet School of Agriculture graduation requirements.

OFFICE HOURS

I am very happy to meet with you during office hours and to confer with you by email (please use your wiu.edu address). Office hours will be in person in my office unless otherwise scheduled. If your schedule prohibits you from attending my office hours, please make an appointment or if my door is open just stop by. Please come prepared and it always to best to come before you have a serious problem. You will find that if you put forth a deserving positive effort, I will do my absolute best to help you succeed.

COURSE GRADING

Final grade in class based on a percentage of total possible points accumulated in both lecture and laboratory. A class curve may be used.

A. Graded Items

Lecture	Points	Dates
3 hour Exams	100	09/16/22, 10/12/22, 11/9/22
Quizzes ¹	60	
Projects	100	
Final Exam	100	12/12/22
Lab	100	
Total	660	

- ¹Quizzes will available online at Western Online website on Friday at 5 PM and be available until Monday at 5 PM. These quizzes will start on 08/26/22 (subsequent dates include: 09/09, 9/23, 10/07,

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10/21, 11/04, 11/18, 12/2) They will be 10 points each, and you will be given a time limit and only one attempt. No make-up on quizzes. Quizzes will focus on material since the last quiz but are cumulative. The two lowest quiz scores will be dropped at the end of the semester.

- Individual scores will be recorded on Western Online for student's information only and are NOT the final grade determination. Any discrepancy in Western Online scores need to be brought to the instructor's attention early in the quarter in order for any correction to be made prior to the end of the quarter.

B. Final grade - minimum percentages.

A	=	94-100%
A-	=	90 – 93.99%
B+	=	87 – 89.99%
B	=	84 – 86.99%
B-	=	80 - 83.99%
C+	=	77 – 79.99%
C	=	70 – 76.99%
D	=	60%

At the end of the quarter, grade percentage breaks may be lowered, but never raised.

COURSE OUTLINE

Week 1 – Introduction: Nutritional Terms and Definitions

Week 2 – Life Cycle and Nutritional Requirements

Week 3 – Glucose and Fatty Acids

Week 4 – Amino Acids and Proteins

Week 5 – Vitamins

Week 6 – Minerals

Week 7 – Basics of Nutrient Requirements

Week 8, 9, 10 – GIT Form and Function

Week 11, 12, 13 – Feedstuffs

Week 14, 15, 16 – Manufacturing/Formulation

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