



CTE Director: Brittany Killgore, 701-572-2835

ANSC 123: FEEDS AND FEEDING

COURSE SYLLABUS

COURSE INFORMATION

ANSC 123: Feeds and Feeding (31588), 3 credits, 1:00-1:50PM MWF, Western Star Career and Technology Center 127

Course Description: Principles of feeding livestock including digestive systems, nutrient requirements, nutrient characteristics, and sources utilized in the formulation of balanced rations.

INSTRUCTOR

Jessalyn Obenchain, Western Star Career and Technology Center 129, 701-774-4532 jessalyn.obenchain@willistonstate.edu

Office Hours: MW 2-3PM, T 9-11AM, F 12-1PM

TEXTBOOK & MATERIALS

None needed.

STUDENT LEARNING OUTCOMES

INSTITUTIONAL OUTCOMES

1.) Students will use reasoning skills to analyze and solve problems.

PROGRAM OUTCOMES

- 1.) Apply fundamental agricultural principles, practices, and technologies to the various agriculture sectors
- 2.) Apply agricultural business principles and policies to farm and ranch management
- 3.) Demonstrate practices of sustainable livestock and ranch production
- 4.) Demonstrate practices of sustainable crop and farm production
- 5.) Implement quality management practices in agriculture production
- 6.) Apply holistic ecosystem practices for sustainable land management
- 7.) Demonstrate leadership and career skills needed to be successful the agriculture industry
- 8.) Formulate practical solutions agricultural industry challenges

COURSE OUTCOMES

- 1.) Express working knowledge of animal nutrition.
- 2.) Classify common feedstuffs.
- 3.) Calculate ration formulations.

ASSESSMENT TASKS (FOR COURSE OUTCOMES)

- 1.) Complete textbook readings, questions, and problems demonstrating mastery of both concepts and process skills.
- 2.) Complete examinations demonstrating mastery of both concepts and process skills.
- 3.) Complete physical labs to demonstrate the understanding of concepts.

PROCESS SKILLS

- Define nutrition and terms associated with it
- Identify parts and types of digestive systems
- Categorize feedstuffs
- Discover sampling tactics
- Examine different nutrients needed
- Calculate rations

CONCEPTS & ISSUES

- Monogastric digestive system
- Ruminant digestive system
- Feedstuff classifications
- Digestion and absorption
- Pearson Square
- Calculating crude protein content
- Calculating feed costs
- Dietary energy
- Carbohydrates
- Proteins
- Lipids
- Minerals
- Vitamins
- Water
- Feeding swine, beef, dairy, sheep and, horses

ASSESSMENT PORTFOLIO

Each degree seeking student is required to maintain an assessment portfolio on Blackboard for his/her time at Williston State College. For this class you should include evidence of completing institutional learning outcomes of what you learned in this class.

GRADING SYSTEM

Required Assignments	Points	Percentage (%)
Tests (2): Midterm and Final	150 x 2 = 300	23
Quizzes (2)	75 x 2 = 150	12
Discussions (4)	25 x 4 = 100	7
Lab Reports (8)	50 x 8 = 400	31
Assignments (4)	50 x 4 = 200	15
Feedlot Tour	150	12
Total	1300	100

^{***}Bonus points will be awarded throughout the semester.

GRADING BASIS

Letter	Percent
A	=>90
В	=>80
С	=>70
D	=>60
F	<60

ASSIGNMENT DESCRIPTION

- Only two tests will be given throughout the semester, a midterm and a final; they will be comprehensive and given in an online format.
 - Failure to complete the final exam will result in an "F" for a final grade in the course.
- The two quizzes will only cover current material, and will not be comprehensive.
 - Tests/quizzes must be completed by the due date, or a "0%" will be given.
 Arrangements must be made TWO DAYS prior to when the test/quiz is given in order to make up test/quiz beforehand. You will not be allowed to take the test after the due date NO EXCEPTIONS.
 - Taking tests/quizzes with other classmates is unacceptable and considered cheating. If students' test/quiz times overlap or similar answers are given, a "0%" will be received with no option to retake.
- Four assignments and eight labs will be assigned throughout the semester. These are to be written double-spaced in Times New Roman font, 12 pt. In the header, will be the class and assignment label, the date, and your name; this is shown below:

ANSC 123 – Assignment #1

8-31-25

Your Name

• All assignments/lab reports are to be turned in on Blackboard by the due date.

- All assignments are due one week after assigned. For each business day assignments are late, 20% will be deducted until the grades reaches 0%.
- All answers can be found within the course material. Any answers that are "Googled" will not be given credit. If any outside sources are needed, the instructor will advise you where to find reputable information.
- The class will attend a MANDATORY feedlot tour field trip for our class project, composing of 12% of your grade.
- More detailed guidance and rubrics will be provided for each of the assignments.

SCOPE AND SEQUENCE OF THE COURSE (SUBJECT TO CHANGE)

Week	Chapter	Assignment/Lab/Test
1	1 – Livestock Feeding	First Day Points
2	2 – The Gastrointestinal Tract and Nutrient	Lab #1 – GI Tract Anatomy
	Utilization	
3	3 – Nutrients: Their Metabolism and	Assignment #1 – Feed Nutrients
	Feeding Standards	
4	Nutritional Problems Overview	Discussion - Nitrates Podcast
	Feed + Water Toxicities	Lab #2 – Feed + Water Testing
5	4 – Feedstuffs	Assignment #2 – Feedstuff Terms
	Quiz #1 (Ch 1-4)	Quiz #1
6	Feed Classifications Overview	Lab #3 – High Energy Feeds
	5 – High Energy Feedstuffs	
7	6 – Supplemental Protein Sources	Lab #4 – Protein Supplements
8	7 – Roughages	Lab #5 – Forage Analysis
9	8 – Mineral and Vitamin Supplements	Discussion – Supplementation
	Midterm (Ch 1-8)	MIDTERM EXAM
10	9 – Feed Additives	Discussion – Medicated Feed
	Feed Labels Overview	
11	Basic Cattle Nutrition Webinar	Lab #6 – Pearson Square
	Intro to Ration Balancing	
	Pearson Square Overview	
12	12 – Ration Formulation	Lab #7 – Ration Balancing + Beef Rations
	17 – Feeding the Beef Cow Herd	
13	18 – Feeding Growing-Finishing Beef	
	Cattle	
	Grass Finished vs. Feedlot Finished	Discussion – Grass vs. Feedlot Finished
	Quiz #2 (Ch 9, 12, 17-18)	Quiz #2
14	CowCulator Overview	Assignment #3 – CowCulator Download
15	CowCulator Rations	Lab #8 – CowCulator Rations
16	Feedlot Tour	Feedlot Tour
	13 – Feeding Swine	Assignment #4 – Feeding Sheep and Swine
	20 – Feeding Sheep	
17	Final (Ch 1-9, 12-13, 17-18, 20)	FINAL EXAM

ACCESSIBILITY STATEMENT

Williston State College is committed to providing equal access to students. If you have a disability which may impact your performance, attendance, or grades in this course that requires accommodations, you must first register with the WSC Accessibility Support Office. Please note that classroom accommodations cannot be provided until your instructors receive an Accommodations Form, signed by you and the Accessibility Support Office.

IMPORTANT DATES

- Last day to drop: 9-3-2025
- Last day to withdraw (with W): 11-14-2025
- For important dates concerning holidays, last date to withdraw from class, etc., please visit the WSC catalog available on the website: www.willistonstate.edu.

ACADEMIC RESOURCES

Take advantage of academic resources available to you at Williston State College:

- Communication Lab: Supplemental instruction is provided to assist students who are either having difficulty or desiring extra help with specific subjects. The Communication Lab assists with composition, writing, communication, and public speaking. The Communication Lab is located in the Fireside Lounge in the Learning Commons. Students can make appointments at wsc.writinglab@willistonstate.edu.
- Math Lab: Supplemental instruction is provided to assist students who are either having difficulty or desiring extra help with specific subjects. The Math Lab assists with all math needs. The Math Lab is located in Stevens Hall Science Lounge.
- Learning Commons: It's not just the Library anymore. In addition to the normal library functions (book checkout, research assistance, etc.), the Learning Commons serves a number of other functions. In the Learning Common you can check out study rooms, check out graphing calculators, utilize computers and print school related materials. Technical support for your online courses is also available in the Learning Commons. For technical support please stop in the Learning Commons or call 701.774.4590 or email wsc.extendedlearning@willistonstate.edu. For library support or questions call 701.774.4226.
- SmarThinking: Web based program that offers live tutoring services in a variety of subject areas at no cost to the student. With SmarThinking you can access live tutors, ask a question and come back the next day for a response, and/or submit writing pieces to be reviewed. If you have further questions or need assistance in using this great tool, please stop in the Learning Commons in Stevens Hall or contact Katie Wenke at 701-774-4594.

STUDENT ACADEMIC INTEGRITY

Work submitted for this course must follow Student Academic Integrity as cited in the WSC Student Code of Conduct:

• Acts of cheating and plagiarism are prohibited. Cases of academic dishonesty may be treated as an academic matter or as a disciplinary matter at the discretion of the instructor.

- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment. It includes using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.
- Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition.
- Self-plagiarism is the use of one's own previous work in another context without citing that it was used previously.
- Students may not use generative Artificial Intelligence (AI) in any form to complete any course work without explicit permission from the instructor. If explicit permission is given by an instructor, through indication in the syllabus or in individual instructions for course activities/assignments, students must use AI in a responsible and ethical manner and attribute or cite appropriately. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Williston State College Student Code of Conduct.
- The instructor may reflect the incident of academic dishonesty through the assignment of the student's grade in the course. If the student has a grievance related to this action, that grievance would be directed to the Chair of the department in which the course is housed.
- Alternatively, the instructor may refer the case as a disciplinary matter to the Vice President for Academic Affairs. The Vice President for Academic Affairs may refer the case to the Student Review Committee for action.

Breach of academic integrity may result in failure of the assignment, exam, and/or class.

STUDENT RESPONSIBILITIES:

- You are expected to read the relevant materials and participate in class discussions in a timely manner
- You are expected to respect your fellow students and the instructor in online and on campus discussions.
- It is your responsibility to ask questions when you are uncertain about assignments or course materials.
- If you have questions concerning grades, you should contact the Instructor immediately. You are responsible for checking Blackboard in a timely fashion to ensure that the grade recorded is your correct grade.
- It is your responsibility to contact the instructor as soon as possible if you are encountering any issues that would hinder your performance in this class.
- You are responsible for earning your grade (with the instructor making every effort to help you learn the material).
- If you are concerned about your grade, you should speak to the Instructor NO LATER than midterm. No consideration will be given to request to adjust your grade at the end of the semester unless there is an error in calculations.

TEAMS ETIQUETTE:

- For distance or online students, this class will be taught using Microsoft Teams. The following etiquette must be followed at all times while in class over Teams:
 - O You are expected to be in the classroom at WSC/DCB for class
 - o Join the Teams meeting/class on time

- The Teams invitation link will be sent in Outlook and posted on Blackboard
- O Use your real name, as is shown in Blackboard
- No recording Teams meetings
- o Keep your camera on the entire class period
- o Stay muted, unless speaking
- Participates in class discussions
- o Ask questions as needed
- o Be present, pay attention!

GRIEVANCE POLICY

Occasionally, students are dissatisfied with some dimension of the course. In such cases, students should first schedule a meeting with the instructor. If the student and instructor cannot reach a satisfactory resolution, the student should schedule a meeting with the Chair of the Department. (See the Student Code of Conduct.)

TITLE IX

Survivors of sexual assault, domestic violence, and sexual harassment: please be aware that as an instructor, I am legally obligated to report all instances of sexual assault, domestic violence, and sexual harassment involving students. If you would like to speak to someone confidentially, please contact the WSC Counselor at (701)774-4212 (they are NOT mandated to report such instances).

FINAL EXAMS/ACTIVITIES

Students are required to take the final examination or engage in the final activity on the date and at the time presented as part of the course syllabus. Exceptions may be made only in emergency situations and in the case of scheduling conflicts with college sponsored events by promptly submitting a written request detailing the circumstances to the instructor of the course. **Your meeting time for your final is: finals week, online.**