

**ANEQ476 – Feedlot Systems
Spring 2017**

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SCHEDULE: Lecture and Guest Speakers
TU and TH; 11:00 AM to 12:15 PM
Room 103 Walnut (Walnut is at the SW corner of Centre and Lake.)

Field Trip
TU or TH; 11:00 AM to 7:00 PM
Date – April 11, 2017

Oral Mid-term (Individual Performance Evaluation)
Monday, February 27 through Friday, March 10
Specific times – TBD

Spring Break – March 11 through 19

Last class period – May 4

No Final Exam

OFFICE HOURS:

Office hours will be by appointment or on M – W – F mornings from 9 to 11 AM.
Students wishing to discuss feedlot issues or seeking help with assignments are encouraged to participate.

LEARNING MANAGEMENT SYSTEM:

I will be using Canvas to keep track of grades and to provide lecture notes, assignments, and other materials. Students are expected to learn Canvas and to check it frequently for class lecture notes, assignments, and other materials.

ANEQ476 – Feedlot Systems
Spring 2017

ATTENDANCE:

It will be difficult to miss class and do an adequate job summarizing each speaker's presentation or completing each homework assignment. You are strongly encouraged to attend class and in the event that you miss, you will be required obtain notes from your classmates to help you with the writing assignments or homework. I will provide slides from each of my lectures; however, not all speakers will do so.

Historically, several students have missed several of the first class sessions due to the National Western Stock Show, the National Cattlemen's Beef Association convention, and Judging Team trips. Since all assignments are submitted electronically, students missing class even for University sponsored trips will be expected to meet most of the deadlines described below. Deviations to the listed due dates will be considered only if requested in writing no later than 1 week in advance.

INTRODUCTION:

Historically, feedlot managers could rely almost exclusively on superior animal husbandry skills to succeed in the feedlot industry. However, the industry has evolved into a highly technical complex business and simply providing excellent care for cattle no longer ensures success. Feedlot management personnel indicate that the most important skills required for success in the feedlot industry include:

1. **People Skills.** Human relationships that abound in the feedlot include not only include employee – employer and management – labor relationships but also relationships with customers, consultants, contractors, sales representatives, regulatory agency personnel, politicians, community members, and industry leaders.
2. **Business Skills.**
 - a. Setting standards for success
 - b. Measuring quality
 - c. Evaluating inputs and outputs
 - d. Continuously improving production processes
3. **Market Skills.** A thorough understanding of changing input and output market conditions.

COURSE OBJECTIVES:

1. Students will learn to evaluate feedlot production as a complex system with many moving parts. Changes to one area or part of the system greatly affects inputs and outputs from other system components.
 - a. Students will learn how the concept of continuous quality improvement can be utilized to evaluate feedlot systems.
 - b. Students will learn to analyze complex problems and develop strategies to effectively deal with feedlot production issues.

**ANEQ476 – Feedlot Systems
Spring 2017**

2. Students will learn to effectively use Microsoft Excel to assist with problem solving.
3. Students will understand the interpersonal relationships that abound in the feedlot business.
 - a. Students will learn strategies to effectively manage relationships with consultants, contractors, inspectors, and community members.
 - b. Students will learn the basics of effective personnel management including conflict resolution, recruitment, team building, interviewing, evaluations, and discipline.
4. Students will learn how to follow corn and cattle market trends and use this information in the decision making process.

REQUIRED READING:

Wagner, J. J., S. L. Archibeque, and D. M. Feuz. 2014. The Modern Feedlot for Finishing Cattle. In *Annual Review of Animal Biosciences*. Vol. 2:535-554. DOI: 10.1146/annurev-animal-022513-114239

Waggoner, J. 2017. Focus on Feedlots. Kansas State University Cooperative Extension. <http://www.asi.k-state.edu/about/newsletters/focus-on-feedlots/>

OUTSIDE SPEAKERS:

Several outside speakers will be utilized. These speakers will be from academia and the feedlot industry. Students should consider the interactions with these speakers as preliminary employment interviews and should dress and act accordingly.

FIELD TRIP:

We will be visiting Cactus Hill Ranch (lamb and cattle feedlot), Front Range Energy (ethanol plant), and another commercial feedyard (TBD). We will be leaving at 11 AM on TU April 11 and returning early that same evening. **Students are required to wear appropriate closed toe shoes or boots, long pants, and other clothing that is suitable for industrial or feedlot environments and outdoor weather conditions.** Front Range Energy will not allow anyone to tour their plant without appropriate footwear or clothing.

ASSIGNMENTS AND GRADING:

This course should be considered as your first experience in the professional work place. From that perspective there will be no traditional quizzes or exams. Your grade will be based on frequent writing or homework assignments, a group project and presentation, a field trip report, an individual market charting and journal assignment, and an oral mid-term performance appraisal (Table 1). **My expectation is that the body of work that each of you completes for**

**ANEQ476 – Feedlot Systems
Spring 2017**

this class represents the very best of your college career and reflects the kind of work you would complete as a young professional in a business environment.

Item	Points	Percentage
Market Journal Project	250	25
Group Project	250	25
Field Trip and Report	100	10
Midterm – Oral Performance Appraisal	100	10
Speaker Reports (9 @ 20 points)	180	18
Homework Assignments (6 @ 20 points)	120	12
Total	1000	100

All work is to be submitted electronically using Microsoft (Word, Excel, or Power Point) software. Many students use Apple computers and software. It is the responsibility of the student to submit materials in a Microsoft format. It is not my responsibility to figure out ways to open and review your files.

You will have a minimum of one week to complete most writing or homework assignments. Writing and homework assignments will be due on Tuesdays or Thursdays of the semester by 11:00 AM. Late assignments will be accepted through 5 business days following the due date, but a 10% reduction per day will be applied to your score for that assignment. No writing or homework assignments will be accepted after COB on the 5th business day after the assignment is due. This late assignment policy will also apply to prearranged alternative due dates, required to accommodate excused absences.

SPEAKER REPORTS:

For each speaker (excluding JJ Wagner) students will be required to write a 2 page report describing the speaker’s presentation. **Do not simply regurgitate the presentation by the speaker.** These reports should link the presentation to class material and the information presented by previous speakers. Tell me what you think and demonstrate that you are assimilating all the information presented in class. These reports should include the following:

1. Brief biography of the speaker.
2. Objectives of the presentation.
3. Summary of the facts presented.
4. How do these facts relate to material covered in class and events or trends taking place in the region, nation, or world?
5. Conclusion

All Speaker Reports must adhere to the following style and form:

1. No less than 2 pages and no more than three 8.5 by 11 inch pages;
2. 12 point, Times New Roman font;
3. Double spaced;

**ANEQ476 – Feedlot Systems
Spring 2017**

4. Half inch indentation at the start of each paragraph; and
5. Top, left, right, and bottom margin must be exactly 1 inch.

FIELD TRIP REPORT:

For the Field Trip Report, students will be expected to work in groups of 2 to 3 individuals of your own choosing. This report should link the field trip with lecture material and outside speaker presentations in order to demonstrate that you understand material presented in class. A 6 to 10 page written report describing what is covered during the field trip will be required. **Do not have each group member each write 3 pages and simply stick them together for a report. Quality reports will be well organized perhaps using section headings and will flow from section to section as one document.**

The Field Trip Report must adhere to the following style and form:

1. 6 to 10 pages (8.5 by 11 inch) excluding photographs, tables, and charts;
2. 12 point, Times New Roman font;
3. Double spaced;
4. Half inch indentation at the start of each paragraph; and
5. Top, left, right, and bottom margin must be exactly 1 inch.

MARKET JOURNAL PROJECT:

The Market Journal Project will be due by COB on May 5. Journals should contain 3 SPC charts:

1. One chart for your estimated weekly fed cattle sales price;
2. One chart for your estimated weekly corn price; and
3. One chart that shows both your estimated weekly breakeven feeder cattle price and actual weekly feeder cattle prices from a market of your choice.

Your journal should discuss whether feeder cattle could have been purchased each week with a reasonable chance of breaking even. Be certain you should describe what market factors you based your weekly purchase decision on.

The Market Journal Report must adhere to the following style and form:

1. 6 to 10 pages (8.5 by 11 inch);
2. 12 point, Times New Roman font;
3. Double spaced;
4. Half inch indentation at the start of each paragraph; and
5. Top, left, right, and bottom margin must be exactly 1 inch.

ORAL MIDTERM EXAM:

The Oral Midterm Exam will be conducted in a similar fashion as an oral job performance appraisal. You will be scored based on several criteria including: class and group project participation; progress on your market project; and general knowledge of the material presented in class.

**ANEQ476 – Feedlot Systems
Spring 2017**

GROUP PROJECT:

For the Group Project, students will be assigned to groups of no less than 4 or more than 5 students. Each group will be asked to solve a production problem, write a report outlining the problem analysis and solution, and present a 20 minute talk describing the findings of the group. **Do not simply regurgitate course materials as your report. Do not have each person write 5 to 6 pages of the report and stick them together at the end of the semester.** Quality reports will be well organized and flow from section to section. The report should include an analysis of what the problem boils down to, specific suggestions for solving the problem, and most importantly an economic assessment of the issues involved. All members of the group must present some of the talk.

The Group Project Report must adhere to the following style and form:

1. 20 to 30 pages (8.5 by 11 inch) excluding photographs, charts, and diagrams;
2. An appendix section containing copies of the presentation slides;
3. A minimum of 10 references, 5 must be from refereed journals;
4. 12 point, Times New Roman font;
5. Double spaced;
6. Half inch indentation at the start of each paragraph; and
7. Top, left, right, and bottom margin must be exactly 1 inch.

HOMEWORK ASSIGNMENTS:

Periodic homework problems will be assigned. Students will be expected to complete these assignments using Microsoft Excel. Hand written sheets of multiple calculations will not be accepted.

GRADING SCALE:

Percentage	Points	Grade
≥ 90%	≥ 900	A
87 – 89.9%	870 – 899	B+
80 – 86.9%	800 – 869	B
77 – 79.9%	770 – 799	C+
70 – 76.9%	700 – 799	C
60 – 69.9%	600 – 699	D
< 60%	< 600	F

SCHEDULE:

The following is the course schedule as planned at the beginning of the semester. Most of these presentations will occur on the scheduled days; however, unexpected changes to the speaker schedule may occur at any time. Reasonable efforts will be made to keep students informed of changes in the schedule that may occur.

**ANEQ476 – Feedlot Systems
Spring 2017**

Date	Day	Topic	Speaker
17 JAN	TU	“Class Syllabus, Policies, and Grading.” “History of Cattle Feeding.”	J. J. Wagner
19 JAN	TH	“Breakeven Analysis.” Homework Assignment 1 – Breakeven Calculations. Market Report and Charting Assignment. Group Project Assigned.	J. J. Wagner
24 JAN	TU	“Business Management Principles.” Homework Assignment 2 – SPC Charts.	J. J. Wagner
26 JAN	TH	“Feedlot Organization and Personnel.” Homework 1 due.	J. J. Wagner
31 JAN	TU	“Human Resource Issues in Feedlots.” Homework 2 due.	J. J. Wagner
02 FEB	TH	“Human Resource Issues in Feedlots – Continued.” Homework Assignment 3 – Job description, Classified Ad, Verbal Interview Questions.	J. J. Wagner
07 FEB	TU	“Changing Demographics of Agricultural Workers.”	Dr. Noa Roman-Muniz, Associate Professor, Department of Animal Science
09 FEB	TH	“Feedlot Management – The Good, The Bad, and The Ugly” Homework 3 due.	Brett Ulrich, Assistant General Manager, JBS – Five Rivers Kuner Feedlot, Kersey, CO
14 FEB	TU	“Factors Affecting Feedlot Profit and Interpreting Feedlot Close-Outs.” Roman-Muniz speaker report due.	J. J. Wagner
16 FEB	TH	“Purchasing Feed Commodities and Managing Shrink.” Ulrich Speaker Report due. Homework Assignment 4 – Feed Price Comparisons.	J. J. Wagner
21 FEB	TU	“Beef Carcass Evaluation”	Dr. Dale Woerner, Associate Professor, Department of Animal Science CSU Meat Science
23 FEB	TH	“Fed Cattle Marketing 101 – Grid Calculations.” Homework 4 due. Homework Assignment 5 – Grid Marketing	J. J. Wagner
27 FEB	M – F,	Oral Class Performance Evaluation.	J. J. Wagner, Sam Jalali,

**ANEQ476 – Feedlot Systems
Spring 2017**

– 10 MAR	Times TBD		and Ashley Budde
28 FEB	TU	“Purchasing Feeder Cattle.” CSU Meat Science Speaker Report due.	J. J. Wagner
02 MAR	TH	“Futures and Options Markets – Managing Cattle and Corn Market Risk” Homework 5 due.	Dr. S. R. Koontz, Professor, Department of Agriculture and Resource Economics
07 MAR	TU	“Grain Processing”	J. J. Wagner
09 MAR	TH	“Applied Feedlot Nutrition.” Koontz Speaker Report due. Homework Assignment 6 – Feed Budget.	J. J. Wagner
12 – 20 MAR	SA – SU	Spring Break	
21 MAR	TU	“Feedlot Health I – Vaccination and Processing.”	Dr. R. Callan, Professor, Department of Clinical Sciences
23 MAR	TH	“Feedlot Health II – Diagnosis, Antibiotic Therapy, Hospital Management, and Necropsies.” Homework 6 due.	Dr. D. VanMetre, Professor, Department of Clinical Sciences
28 MAR	TU	“Feed Additives and VFD.” Callan Speaker Report due.	J. J. Wagner
30 MAR	TH	“Growth Promotion – Implants and Beta- agonists.” VanMetre Speaker Report due.	
04 APR	TU	“Humane Handling of Feedlot Cattle.”	Dr. Temple Grandin, Professor, Department of Animal Science
06 APR	TH	“Feedlot Design.” Streeter Speaker Report due.	J. J. Wagner
11 APR	TU	Field Trip 11:00 AM – 7:30 PM Destinations: Cactus Hill Ranch, Fort Collins Front Range Energy, Windsor Plus TBD Grandin Speaker Report due.	Will Nelson, Cactus Hill Brad Olson, Front Range
13 APR	TH	“Nutrient Management in Feedlots.”	Dr. Shawn Archibeque, Associate Professor, Department of Animal Science
18 APR	TU	Student Group Reports.	
20 APR	TH	Student Group Reports. Archibeque Speaker Report due.	
25 APR	TU	Student Group Reports.	

**ANEQ476 – Feedlot Systems
Spring 2017**

		Field Trip Report due.	
27 APR	TH	Student Group Reports.	
02 MAY	TU	Student Group Reports.	
04 MAY	TH	Learning After Doing Session (LADS). Course Evaluation	
05 MAY	F (COB)	Market Charts and Journal due. Last day to turn in group projects.	

ACADEMIC INTEGRITY:

Portions of this academic integrity discussion were copied with permission from Greg Dickinson, Director of Graduate Studies and Professor of Communication Studies. Colorado State University takes academic integrity seriously. At minimum, academic integrity means that no one will use another’s work as their own. The CSU writing center defines plagiarism as: “The unauthorized or unacknowledged use of another person’s academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding credit be given where credit is due” (Writing Guides: Understanding Plagiarism. <http://writing.colostate.edu/guides/researchsources/understandingplagiarism/plagiarismoverview.cfm>. Accessed, January 15, 2009). If you plagiarize in your work you could lose credit for the plagiarized work, fail the assignment, or fail the course. Plagiarism could result in expulsion from the university. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU *General Catalog* (see page seven, column two: <http://www.catalog.colostate.edu/front/policies.aspx>).

Of course, academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes **regular class attendance, careful consideration of all class materials, and engagement with the class and your fellow students**. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community.

Please read and consider the meaning of the CSU Honor Pledge

“I have not given, received, or used any unauthorized assistance.”

NEED HELP:

CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970-491-6053 or go to <http://health.colostate.edu>. If you are concerned about a friend or peer, “Tell Someone” by calling 970-491-1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources (<http://safety.colostate.edu/tell-someone.aspx>).