

Animal Science 6341

Advanced Animal Nutrition



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Office Hours: If the door is open, come on in. If not, then please email me to set up an appointment, and/or state your question, comment, or concern.

Course Information

Course Description

To provide a mock scenario of running a stocker operation. Fundamental nutritional and economic information, resources, and equations will be presented at the very beginning of the course. Students will then “buy” weaned calves in a mock auction. Some of these calves may be pre-conditioned, others not; varying but similar weights. Students will keep the calves on the cooler season grazing of their choice, in their region of choice, plus any other supplements, substitutions, minerals, ionophores, growth implants, etc. that would be necessary to prepare the calves for the feedlot. Students will create a spreadsheet showing all the inputs, costs, and expenses incurred, the days of the gain period, the weight gained over the gain period, morbidity, mortality, veterinary treatments, and ultimately, the cost of gain against the value of gain, in order to determine profit (-, 0, or +).

Prerequisites

A considerable interest in learning about beef cattle, and the industry.

Student Learning Outcomes

My goal for this course is to provide students with a real world, three-dimensional view (to the extent possible) of all that a stocker operation entails: nutritionally, and also economically.

Course Delivery

This is a face-to-face course with online components such as announcements, assignments, and possible supplementary material that students are expected to access in [Blackboard](#).¹

Recommended Text

Beef Cattle Production Systems, by Andy D. Herring. (Optional, but recommended for you use in the class, and for the future)

National Research Council: Nutrient requirements of beef cattle (update 2000, by National Academy Press). Also, a good resource for current, and future use. Optional, and recommended; but not required.

Technology Requirements

To successfully complete this course, students need to be able to get onto Blackboard to check for announcements, and view/download/complete/submit assignments, as they are given.

Communication

Email: jlangdon@angelo.edu

Office Phone: 325-486-6925

Office Room #: Vincent (VIN) 227 (email, or talk with me to set up an appointment)

Blackboard: View for announcements, and for assignments.

Grading

Evaluation and Grades

EXAMINATIONS: Occasional quizzes (in class)
Spreadsheet (cumulative, and final exam)

GRADES: Quizzes $\frac{1}{4}$
 Spreadsheet $\frac{3}{4}$

Grading System

Course grades will depend on completing course requirements and meeting the student learning outcomes.

This course uses the following grading scale:

A = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

Assignment and Activity Descriptions

Occasional in-class quizzes, and a cumulative nutritional / economics detail and summary spreadsheet of their mock stocker operation which the student will explain, defend, and discuss at the end of the course.

LECTURE OUTLINE

- I. Introduction (1)
 - a. Basis for grading
 - b. Establishing objectives (briefly define cost and value of gain)

- II. Beef cattle nutrition and economics: geared toward a stocker operation (for the remaining lectures)
 - a. Buying weaned calves for a stocker operation, at current market price – mock auction
 - b. Value of gain (in depth)
 - c. Cost of gain (in depth)
 - d. Profit
 - e. Breakeven
 - f. Costs vs. expenses
 - g. Utilization of the NRC manual for nutrient requirements of beef cattle
 - h. Maintenance requirements
 - i. Nutritional demands of growth, and weight gain
 - j. Feed intake, and average daily gain estimation
 - k. Grazing, and region of operation
 - l. Supplementation vs. substitution
 - m. Minerals, and ionophores
 - n. Growth implants
 - o. Miscellaneous
 - i. Questions, comments, concerns, ideas, etc.
 - ii. Other useful resources to discuss as it relates to the project

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)²
- [Angelo State University Catalog](#)³

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).⁴

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁵ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁶ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁷ in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).⁸

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 [Student Absence for Observance of Religious Holy Day](#)⁹ for more information.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)¹⁰

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).¹¹

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)¹² web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

¹ <https://blackboard.angelo.edu/>

² <https://www.angelo.edu/current-students/student-handbook/>

³ <https://www.angelo.edu/academics/catalog/>

⁴ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁵ <https://www.angelo.edu/current-students/disability-services/>

⁶ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁷ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁸ https://www.angelo.edu/current-students/writing-center/academic_honesty.php

⁹ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

¹⁰ <https://www.angelo.edu/incident-form>

¹¹ <https://www.angelo.edu/title-ix>

¹² <https://www.angelo.edu/covid-19/>