

Course Syllabus

AGEC 4342/5342 – Agribusiness Statistics

Instructor

Andrew P. Wright, Ph.D.

Email: andrew.wright@angelo.edu

Phone: (325) 486-6751

Office Location: #219, Vincent Building

Office Hours: Monday-Thursday, 2:30-3:30 pm, by appointment, or at any time that I am in my office.

Feel free to knock if the door is closed.

Course Description

This course is designed to provide students with an introduction to the fundamental process and methods of statistical analysis. During this course students will learn how to describe data visually and numerically, how to evaluate the probability of an event, and how to test statistical hypotheses.

Meeting Time & Location

Lecture: VIN 263; 8:00-8:50 am, Monday & Wednesday

Lab: VIN 263; 1:00-2:50 pm or 3:00-3:50 pm, Thursday

Prerequisite or Co-Requisite Courses

There are no prerequisite courses for a student to complete before enrolling in AGEC 4342/5342, nor are there any co-requisite courses that a student must be enrolled in at the same time. That said, I do expect that student enrolled in this class have prior experience with the mathematic and algebraic concepts and skills taught in an introductory college algebra or finite mathematics course.

Prerequisite Skills

The mathematic and algebraic skills that a student should possess before enrolling in AGEC 4342/5342 include:

- The ability to find the mean, median, and mode of a set of numbers;
- The ability to compare numbers using ratios, proportions, and/or percentages;
- The ability to solve for an unknown variable in an equation;
- The ability to take given numerical information, plug it in to an equation, and calculate a solution.

The technology and computer skills that a student should possess before enrolling in AGEC 4342 include:

- The ability to access and navigate Internet websites.
- Proficiency with Microsoft Word.
- The ability to convert a document created in Word or a similar program into a .pdf file.
- The ability to upload a document to the course website in Blackboard.

Students should be aware that documents created using Pages will not display correctly in Blackboard. I will consider any work submitted to Blackboard with a .pages extension as incomplete. Such work will receive a grade of zero until it is resubmitted in a readable format and will be subject to any applicable late penalties.

Course Learning Objectives

Idea Objectives

At the end of the semester, you will be asked to fill out an IDEA survey in which you will assess this course in terms of its ability to meet certain objectives. Those objectives are:

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories).
2. Learning to apply course material (to improve thinking, problem solving, and decisions).
3. Learning to analyze and critically evaluate ideas, arguments, and points of view.
4. Learning appropriate methods for collecting, analyzing, and interpreting numerical information.

Agribusiness Program Objectives

As a part of the Agribusiness program, this course introduces students majoring in Agribusiness and students minoring in Agricultural Economics to the use of statistical concepts and procedures. As such, students in these programs of study should expect to make progress in the following areas:

1. Essential Knowledge: Students demonstrate the correct use of the statistical process to analyze data.
2. Critical Thinking Skills: Given a data set and a research problem, students will define the correct null and alternative hypotheses, and correctly interpret the associated test of the null hypothesis.
3. Quantitative Reasoning Skills: Given a data set and a research problem, students will calculate the summary statistics necessary to estimate a confidence interval and perform a hypothesis test.

Progress toward these objectives will be assessed using exams and homework assignments.

Course Delivery

This is a face-to-face course with online components that students are expected to access in [Blackboard](#).¹ Online components include lecture materials such as PowerPoint slides made available in Blackboard, reading assignments deployed via the Pearson MyLab platform, and application assignments deployed using MyLab. To successfully complete this course, students must have reliable and consistent access to its online components.

Required Text and Technology Requirements

This course is based on the 6th edition of ***Statistics: Informed Decisions Using Data*** by Michael Sullivan, III.

To successfully complete this course, students need to purchase access to Pearson's learning platform, MyLab. Doing so will provide you with an electronic copy of the text, and I will use MyLab to deploy reading and study assignments.

I will provide instructions for purchasing access to MyLab during the first week of class. Once you have purchased access to MyLab, you will be able to access all course content, including content from MyLab, through the course Blackboard page.

Grading

Your final grade in this course will be calculated based on the number of points you earn out of 1200. The grading scale for the course is as follows:

- To earn an A, you must earn 1080-1200 points
- To earn a B, you must earn 960-1079 points
- To earn a C, you must earn 840-959 points
- To earn a D, you must earn 720-839 points

You will earn points based on your performance on the following tasks:

- Exams: 200 points
- Homework Assignments: 400 points
- Lab Assignments: 500 points
- Course Entry Tasks: 50 points
- Course exit task: 50 points

There are 600 points that are entirely effort based in the course. For this reason, I will not round an individual student's grade up to the next letter.

Assignment Descriptions

Exams

There are three exams scheduled for this course, two midterm exams and a final exam. Each exam is worth 100 points towards a student's final grade. The final exam is optional and will replace a student's lowest midterm exam score if they choose to take it. If a student is satisfied with their course grade at the end of the semester, they may opt out of the final. Each midterm exam will focus on one or two units of material. The final exam will be cumulative and will include material from each unit of the course. The planned dates for these exams can be found in the course schedule published at the end of this syllabus and on the course page on Blackboard.

Homework Assignments

During the semester you will be required to complete 10 homework assignments. Each assignment is worth 50 points, and I will drop your two lowest scores when I calculate your final grade. The purpose of these assignments is to give you a chance to assess your progress toward the course goals and objectives; therefore, you will be allowed three attempts on each question in each assignment. Keep in mind that, although it is possible to earn full credit on a question through "trial and error", doing so will not help you accomplish the learning goals for the course.

Lab Assignments

During the course you will be required to complete 11 labs. These labs will give you an opportunity to get "hands on" with data and practice statistical procedures and calculations that you learn about in the lectures. Each lab will include a worksheet that you must turn in to me for a grade. Each worksheet is worth 50 points which you will earn by correctly calculating the statistics and interpreting the statistics featured in the lab. I will drop your lowest lab grade when I calculate your final course grade.

Course Entry Assignments

You must complete two entry tasks on or before Sunday, January 23. The purpose of these tasks is to make sure that you are aware of the course goals and policies, that you are prepared to engage with the course materials, and that you are prepared to interact with the various technologies that we use this semester. The two tasks you must complete are:

1. Read the syllabus, review the course policies, review Angelo State's policies regarding academic integrity and academic dishonesty, and complete a set of statements that indicate you understand the course and general academic policies; and,
2. Register for MyLab Statistics and complete a series of orientation exercises.

Completing these tasks will earn you a total of 50 points toward your final grade. These points are largely effort-based; as long as you successfully complete each task you should earn full credit.

Course Exit Assignment

The exit assignment in this course is a final reflection on the course. In this assignment you will reflect on what you have learned this semester, how effective the course and the instructor communicated this knowledge, and you may provide suggestions for future improvements to the course if you wish. This assignment is worth 100 points toward a student's final grade and is entirely effort based. If a student completes this assignment, they will receive full credit.

Late Work Policy

It is vital that you regularly assess your knowledge of the material presented in this course if you want to accomplish the course learning goals. For this reason, every assignment must be completed by the date and time announced in class and on Blackboard. You may complete and submit any assignment after its due date; however, late assignments will receive up to a 50% reduction in their score. The deadline to submit late assignments for partial credit is May 8 at 11:59 pm.

Requesting an Extension or Change in Due Date

As you progress through the course you may find yourself faced with a situation that prevents you from accessing and submitting an assignment by the given due date, or taking an exam during the scheduled exam period. When these circumstances occur, you may contact me to request an extension. When you request an extension please provide an explanation for why you will miss the due date or exam period, why the circumstance cannot reasonably be avoided, and an estimate for when you expect to complete the assignment or exam. Please be aware that I will not usually accommodate an illness without either documentation that a student has seen a doctor or an official letter requesting accommodation from the University.

If you know beforehand that you will be unable to access and/or submit an assignment by the given due date or attend an exam during the scheduled period, you may request that its due date be changed. Once this change is made you will be expected to complete the assignment or exam by the new deadline, and will be subject to the same consequences for missing due dates that any other student faces.

Please submit all requests for extensions or a change in due dates to me by email so that there is a written record of the request. In addition, please note that you are not guaranteed an extension or change in due date that you ask for. I will consider each request based on their individual merits. Please also be aware that simply forgetting to complete a task is not generally a sufficient reason for an extension; however, I usually give every student one "free", no-questions-asked extension. Use this freebie wisely.

Attendance Policies

General Policy

Regular attendance in lectures is a vital part of the learning process for a face-to-face course. For this reason, I expect students enrolled in AGEC 4342/5342 to make every effort to attend every scheduled lecture and in-class activity.

I realize that there may be times when an absence from class is unavoidable. To help students who cannot attend class, I will stream and record each lecture session using Blackboard Collaborate. Students who cannot attend class are welcome to log in to Blackboard to follow the lecture remotely.

Students need to be aware that access to lecture recordings and any other lecture materials, such as PowerPoint slides, lecture notes, or handouts, is a privilege that I extend to you as the instructor. If students take advantage of this and collectively choose not to attend class, I will remove these items from Blackboard. It will then be the student's responsibility to work with their classmates to make up any notes missed during an absence.

How I Take Attendance

I will maintain a record of every student's attendance for each day of class. If I do not record that you were in class then you will be counted absent on that day. If a student come in to class late, it is the student's responsibility to make sure I update the attendance roster for that day.

Information Missed During an Absence

You are responsible for any information related to the class that you miss while absent. I am happy to answer any questions you might have, but I will not reproduce a lecture for you in my office.

Angelo State University Policy on 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](#)ⁱⁱ for more information.

Emailing the Instructor

Communication is an important skill that nearly all employers look for in new employees, and particularly in college graduates. Learning to communicate professionally is vital if you wish to remain employed in any career for very long. For this reason, when you contact me via email, please include a subject, a greeting, and a signature. For example, if you are experiencing a difficulty logging into Connect your email might look like this:

Subject: Blackboard is down

Dear Dr. Wright,

I tried to log in to Blackboard to submit a reading quiz, but the program is down for emergency maintenance. Have any other students encountered this issue? Considering the circumstance, would you please extend the assignment's due date?

Thank you,

[Your Name]

Additional Policies Related to This Course

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

- [Angelo State University Student Handbook](#)ⁱⁱⁱ
- [Angelo State University Catalog](#)^{iv}

Academic Integrity and Misconduct

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](#)^v (Page 97).^{vi}

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](#).^{vii} 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](#)^{viii} for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity Statement](#)^{ix} 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, assignments, 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.

All work submitted by any student is subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).^x

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](#)^{xi}

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](#).^{xii}

Information about COVID-19

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

All students are expected to perform a wellness screening prior to coming to setting foot on campus. Any student that is experiencing COVID-19 symptoms should report their symptoms through the wellness screening app and then report to a COVID-19 testing location to be tested for the virus. Such students will be exempted from the requirement to attend class in person until they receive a negative test result. In addition, such students will be eligible to receive accommodations related to any exams or other in-class work they might miss while they are waiting for a test result or are quarantined.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances. If such a circumstance occurs then I will communicate it in class, via Blackboard, and by email. Once announced, any such change will supersede what is written in this syllabus or is currently published online.

Course Schedule

Here is a summary of what we will cover this semester, along with the planned dates for exams:

Week	Dates	Topic	Chapter
1	January 17-23	Course Orientation	None
2	January 24-30	Introduction to Statistics	1
3	January 31- February 6	Visual Representations of Data	2
4	February 7-13	Numerical Representations of Data	3
5	February 14-20	No Class (SAEA meetings)	None
6	February 21-27	Probability & Random Variables	5 & 6
7	February 28- March 6	The Normal Distribution	7
8	March 7-13	Take Exam 1	None
Spring Break	March 14-20	No class	None
9	March 21-27	Sampling Distributions	8
10	March 28- April 3	Confidence Intervals	9
11	April 4-10	Introduction to Hypothesis Testing	10
12	April 11-17	Introduction to t-tests	10
13	April 18-24	Comparing Two Means	11
14	April 25- May 1	Take Exam 2	None
15	May 2-8	Review for Final Exam	None
Finals	May 9-15	Take Final Exam	None

Here is a summary of what we will cover in labs this semester, along with the planned date for each lab:

Week	Date	Topic
2	January 27	Identify the Statistical Elements of a Study
3	February 3	Build Visual Representations of Data
4	February 10	Build Numerical Representations of Data
5	February 17	Building Box Plots
6	February 24	Probability & Discrete Random Variables
7	March 3	The Normal Distribution
9	March 24	Sampling Distributions
10	March 31	Build a Confidence Interval
11	April 7	Use the Language of Hypothesis Testing
12	April 14	Conduct a t-test for a Single Mean
13	April 21	Compare Two Means Using a t-test

ⁱ <https://blackboard.angelo.edu/>

-
- ii <https://angelo.policystat.com/policy/10659368/latest/>
- iii <https://www.angelo.edu/current-students/student-handbook/>
- iv <https://www.angelo.edu/academics/catalog/>
- v <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>
- vi <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
- vii <https://www.angelo.edu/current-students/disability-services/>
- viii <https://angelo.policystat.com/policy/10659448/latest/>
- ix <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>
- x https://www.angelo.edu/current-students/writing-center/academic_honesty.php
- xi <https://www.angelo.edu/incident-form>
- xii <https://www.angelo.edu/title-ix>
- xiii <https://www.angelo.edu/covid-19/>