Course Syllabus
AGEC 4342/5342 – Agribusiness Statistics

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Office Hours: Monday-Thursday, 3:00-4:00, or any time I am in my office with the door open.

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.

Course Prerequisites
There are no prerequisites for this course; however, I do expect that students taking this course have prior experience with some basic mathematic and algebraic concepts:

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

I will provide opportunities to review and practice these skills to any student who requests them. In addition, the ASU tutoring center is a great resource for help with basic math and algebra skills.

Textbook & Required Materials
- Students are required to register for access to Pearson MyStatLab. To register you will need an access key which can be bought from either the ASU Bookstore or directly from Pearson. Instructions for how to do so will be provided during the first week of class.
- This course is based on the 5th edition of Statistics: Informed Decisions Using Data by Sullivan. Registering for MyStatLab will provide you with access to an electronic copy of the text. Purchasing a hard copy is optional.

Course Learning Objectives
As your instructor I have established a set of learning goals and related objectives. As you engage with the course material please keep these goals and objectives in mind.

- Goal 1: Learn essential knowledge. This goal has four objectives, all of which will be assessed though student performance on homework assignments and exams. The four objectives related to this goal are:
• Students will demonstrate the ability to find the mean, median, mode, variance, and standard deviation of a set of numbers.
• Students will demonstrate the ability to evaluate the probability of a random event using the normal and Student’s t distributions.
• Students will demonstrate the ability to construct a confidence interval around a mean for a given level of confidence.
• Students will demonstrate the ability to calculate t, F, and Chi-square statistics.

• Goal 2: Develop critical thinking and quantitative reasoning skills. This goal has three objectives, all of which will be assessed though student performance on homework assignments and exams. The three objectives related to this goal are:
  o Students will demonstrate the ability to use t, F, and Chi-square statistics to evaluate statistical hypotheses.
  o Students will demonstrate the ability to apply the results of a statistical test to real-world problems.

• Goal 3: Develop communication skills. Students will be required to give at least two short presentations in the lab component of the course. This presentation will be informative and will communicate to the rest of the class how the student approached the lab activity on the day they present. These presentations will be assess according to the quality of the information presented, the presenter’s attitude, and the presenter’s ability to stay within their allotted time using a rubric that will be presented in class.

Grading
Your grade will be calculated based on the number of points you earn out of 700. The grading scale for the course is as follows:

  • A = 630-700 points
  • B = 560-629 points
  • C = 490-559 points
  • D = 420-489 points
  • F = 0-419 points

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

  • Exams – 200 points
  • Orientation assignments – 50 points
  • Homework assignments – 300 points
  • Lab attendance – 100 points
  • Lab presentations – 50 points

Exam Policies
There are two midterm exams planned for this course, each worth 100 points, plus a final exam that is optional and will replace your lowest exam score.

  • The midterm exams are not cumulative.
• The optional final is cumulative and cannot hurt your final grade.
• If you miss an exam and it is an excused absence you will be allowed to take the exam on a different date. It is my preference that you take the exam early if possible.
• If you miss an exam and it is an unexcused absence you will not be allowed to make it up.
• If you are late to an exam you will be allowed to take it as long as no one has turned in their copy. You will not be given extra time to complete the exam if you are late.

Assignments and Assignment Policies
Assignments come in two forms: orientation assignments and application assignments.

General Policy on Late Assignments
An assignment that is submitted after the announced due date is considered late. Any assignment may be turned in late, but will be subject to a 50% penalty to its grade.

Orientation Assignments
You must complete two orientation assignments designed to familiarize you with the course policies and the Connect website. These assignments must be completed by the end of the first week of class and are worth 25 points each.

Application Assignments
Application assignments are meant to assess what you know and still need to work on as we finish each week. Use these assignments to inform how you study and review course material during the semester. There are eleven application assignments, each worth 30 points. For the purpose of your final grade your lowest homework score will be dropped from your point total.

Extra Credit
Students in AGEC 4342 and AGEC 5342 have two opportunities to earn extra credit.

Vocabulary Assignments
Students can earn up to 20 bonus points in the course by completing optional vocabulary assignments. There are ten such assignments, and each assignment must be completed before the start of class on the Monday of the week that the assignment is related to.

Attendance
Any student that completes the semester with 3 or less unexcused absences will receive 15 bonus points added to their point total.

Attendance
Attendance is essential to perform well in this class. I expect students to attend class unless they have been excused beforehand. Furthermore, I expect students to arrive on time and prepared to participate in the lecture and discussion.
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, so if you come in to class late make sure you check in with me at the end of class.

Definition of an Unexcused Absence
Any absence that is not related to a University event or is not approved by me beforehand is unexcused. I am willing to consider excusing any absence as long as you inform me of the absence and explain why it cannot be avoided. Please note that consider does not mean accept.

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.

ASU 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. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

Difficulties with Technology or Other Issues
Should you experience any technical difficulties or other issues that prevent you from completing an assignment contact me AS SOON AS IT OCCURS. If you contact me by email, please use the following format:

Dear Dr. Wright,
[State your difficulty]. Can you please [state your request]?
Thank you,
[Your Name]

Be advised that I may ask some follow up questions and your answers might determine how accommodating I am.

Use of Cell Phones and Electronic Devices
Your cell phone may be left on but should be put away and silenced during lectures. If I see a cell phone out during an exam I will take up your exam and you will receive a failing grade. If you wish to use an electronic device to take notes you may do so; however, if I feel that your use of such a device is causing a distraction I will ask you to put it away.
Academic Integrity and Misconduct
Angelo State University expects its student to maintain complete honesty and integrity in their academic pursuits. Students are responsible for reading and understanding the policies set forth in the Student Handbook.

Americans with Disabilities Act
Angelo State University 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 Act 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. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

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

Policies on Deviations from this Syllabus
While I hope I do not have to make any changes to the course policies or course schedule, there is always the possibility that special circumstances will arise that necessitate changes be made. If such a circumstance occurs then I will communicate it both in class and via Blackboard. Once announced, any such changes will supersede what is written in this syllabus.
**Course Schedule**

Below is a tentative outline of the schedule for this course. Vocabulary assignments, homework assignments, and due dates will be posted to the course Blackboard page.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Course orientation</td>
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<tr>
<td>2</td>
<td>The purpose &amp; process of statistics; Sampling</td>
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<tr>
<td>3</td>
<td>Basic visual &amp; numerical descriptions of data</td>
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<td>4</td>
<td>Measures of position; Linear correlation</td>
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<tr>
<td>5</td>
<td>Probability &amp; probability distributions</td>
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<tr>
<td>6</td>
<td>Probability &amp; random variables; Sampling distributions</td>
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<tr>
<td>7</td>
<td>Exam review (Feb. 26(^{th})); take Exam 1 (Feb. 28(^{th}))</td>
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<tr>
<td>8</td>
<td>Confidence intervals; the Student’s t distribution</td>
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<td></td>
<td>Spring Break</td>
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<tr>
<td>9</td>
<td>Basics of hypothesis testing</td>
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<tr>
<td>10</td>
<td>Testing the difference between two means</td>
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<tr>
<td>11</td>
<td>Chi-square tests</td>
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<tr>
<td>12</td>
<td>Chi-square tests; One-way Analysis of Variance</td>
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<tr>
<td>13</td>
<td>Continue One-way Analysis of Variance</td>
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<tr>
<td>14</td>
<td>Exam review (April 23(^{rd})); take Exam 2 (Feb. 28(^{th}))</td>
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<tr>
<td>15</td>
<td>Review for final exam</td>
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<td></td>
<td>Finals</td>
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<td></td>
<td>Final exam</td>
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\(^{i}\) [http://www.angelo.edu/student-handbook/](http://www.angelo.edu/student-handbook/)