Math 1342.T10- Elementary Statistics- Fall 2020 Syllabus

Disclaimer: This syllabus is current and accurate as of its posting date, but will not be updated. For the most complete and up-to-date course information, contact the instructor.

Instructor Information

<table>
<thead>
<tr>
<th>Name: Mrs. Codi Jaynes</th>
<th>Office Hours: Monday &amp; Wednesday 10:00 – 11:00 am &amp; 2:00 pm – 3:30 pm</th>
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</thead>
<tbody>
<tr>
<td>Office: MCS 220C</td>
<td>Tuesday &amp; Thursday: 11:00 am – 12:00 pm &amp; 2:00 – 3:00 pm</td>
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<tr>
<td>Phone: 325-486-5446</td>
<td>Friday: 10:00 – 11:00 am</td>
</tr>
<tr>
<td>Email: <a href="mailto:codi.jaynes@angelo.edu">codi.jaynes@angelo.edu</a></td>
<td>All hours listed are available online via Blackboard Collaborate. Face-to-face meetings can be arranged by appointment.</td>
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This class meets MWF 1:00 – 1:50 pm and TR 12:30 – 1:45 pm in MCS 214 and online via Blackboard Collaborate.

Course Delivery: To maintain academic quality while accommodating social distancing needs this semester, this course will use a split delivery model that combines face-to-face teaching with remote instruction. The goal is to provide face-to-face instruction to students who want to return to campus, while also allowing students who may need to learn remotely to participate via virtual class sessions.

How Does It Work? Your class will be divided and you will be placed into a smaller group of students to maintain physical distancing requirements in our assigned classroom space.

Your assigned group will receive a schedule of in-person class meetings. This schedule is not flexible. For instance, if you are supposed to attend class on a Monday, you cannot elect to go on Wednesday with another class group instead.

When you are not in the physical class, you will attend live remote sessions at the same time as our scheduled course. You will also be expected to complete coursework via Blackboard.¹

Please refer to this Health and Safety web page² for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Blackboard & Email:
- I post notes, reviews, and other documents on Blackboard. I expect you to print these documents and bring them with you to class when I tell you to. I will also post grades and other important announcements on Blackboard.
- Blackboard can be accessed through RamPort or by visiting http://blackboard.angelo.edu.
- I will frequently send you information via email. It is your responsibility to regularly check your angelo.edu email account. All communication outside of class will be sent to your ASU e-mail account. I will do my best to respond to all emails by the next business day.

Technology Requirements
To successfully complete this course, students need to have daily access to the following technology: smartphone or scanner, laptop/tablet/desktop with webcam/mic, and a printer. Students also need to purchase access to TopHat™ classroom response system. More information regarding this system will be given during the first week of class. TopHat does require a subscription. It is available as an app for smartphones/tablets and as a website for computers.

Lecture Notes: It is your responsibility to print the lecture notes from Blackboard and bring them to class each day. I strongly suggest keeping your notes and other class materials in a 3-ring binder.
**Attendance:** Attendance will be taken **daily via TopHat** and is **mandatory for the entire class period.** As seen in the grading breakdown, 6% of your final average will come from your attendance. I will drop 3 attendance grades at the end of the semester to help compensate for unavoidable circumstances.

**Homework:** Homework will be assigned over every section through **MyStatLab** software. To set up your account, go to Blackboard. To set up an account, you will need the following information:

- A valid email address (Use your angelo.edu email)
- Your student access code

You will need to pay for an access code. If you are unable to pay at the start of the semester, you may use the free 14-day trial. However, remember this free trial **only lasts for 14 days!** After that time, you will need to pay for the access code.

Daily work will consist of homework problems completed on a computer-based system and worksheets/textbook problem sets, submitted virtually through Gradescope. **No late work will be accepted!** I will drop 3 homework/quiz grades at the end of the semester to help compensate for unavoidable circumstances.

**Assessments:** There will be 12 assessments throughout the semester. All together, the assessments will be worth 84% of your final average. Assessments will reflect the course content and be administered during class. Each assessment will be graded for accuracy with no partial credit given. Additional information regarding the assessment procedures and retakes can be found in Blackboard.

**Final Exam:** A comprehensive final exam will be Monday, November 23rd from 1:00 – 3:00 pm and Tuesday, November 24th from 10:30 am – 12:30 pm. Specific details on exam delivery will be given later in the semester. The Final Exam will only influence your final grade by at most one letter. Your final average is calculated following the grading scheme below. The Final Exam will:

- Improve your letter grade by one letter if you score a 90 or above
- Leave your letter grade unaffected if you score between a 60 and 89
- Lower your letter grade by one letter if you score below a 60

**Grading:** Grades will be determined as follows:

- Homework - 10%
- Assessments - 84%
- Daily Attendance/Participation (via TopHat)- 6%
- Final Exam- + or – one letter grade at most

**Final Averages:** Final averages will be determined using the following scale

- A: 90% or above
- B: 80% - 89%
- C: 70% - 79%
- D: 60% - 69%
- F: Below 60%

**Common Courtesy:**
Please refrain from carrying on personal conversations once class has started. Be courteous to your peers when they are responding in class by listening to what they have to say.
You are not given a grade in a college course; you EARN your grade. It is your responsibility to put in as much effort as it takes to earn this grade. This includes utilizing (as needed) all available study aid options (my office hours, the Math Lab, reading outside texts, etc.) to resolve any questions or concerns you might have about any aspect of the course.

**Drop Date: November 10th** is the last day to drop a course with a W or withdraw from ASU.

**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
- Angelo State University Catalog

**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.

**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. 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

**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 for more information.

**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 for more information.
Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Required Use of Masks/Facial Coverings by Students

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

Student Learning Outcomes

1. Students will demonstrate factual knowledge including the mathematical notation and terminology used in this course. Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in statistics including definitions of measures of central tendency; standard deviation; standardized variable; regression line; coefficient of determination; normally distributed variable; sampling distribution of the mean; sampling distribution of the proportion; point estimate; confidence interval estimate; null hypothesis; alternative hypothesis; critical value; and test statistic.

2. The students will describe the fundamental principles including the laws and theorems arising from concepts covered in this course. Students will identify and apply the laws and formulas that result directly from the definitions; for example, calculation of measures of central tendency; standard deviations; coefficients of determination; critical values and test statistics.
3. The students will apply course material along with procedures and techniques covered in this course to solve problems. Students will use the facts, formulas, and techniques learned in this course to find regression equations for data collected; use regression equations to make predictions; calculate probabilities; find confidence intervals for means and proportions; and perform a variety of hypothesis tests.

4. The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields. Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring statistics as a prerequisite, or for work in occupational fields requiring a background in statistics. These fields might include education, business, finance, marketing, computer science, physical sciences, and nursing, as well as further study in other statistic courses.

Course Content
Textbook: *Elementary Statistics*, Ninth Edition, by Neil A. Weiss. The following chapters include the particular sections listed are covered. (See textbook “Contents”)

1. **The Nature of Statistics.** Classifying statistical studies; sampling procedures.
2. **Organizing Data.** Grouping data; graphs and charts; distribution shapes; misleading graphs.
3. **Descriptive Measures.** Mean; median; mode; standard deviation; quartiles; percentiles; deciles; boxplots.
4. **Descriptive Methods in Regression and Correlation.** Regression equation; coefficient of determination; linear correlation.
5. **Probability and Random Variables.** Rules of probability; discrete random variables; probability distributions.
6. **The Normal Distribution.** Areas under the standard normal curve; normally distributed variables.
7. **The Sampling Distribution of the Mean.** Sampling error; mean and standard deviation of the sampling distribution of the mean.
8. **Confidence Intervals for One Population Mean.** Calculate confidence intervals for the mean; margin of error; sample size.
9. **Hypothesis Tests for One Population Mean.** Set up hypothesis tests; errors; perform hypothesis tests.
10. **Inferences for Population Proportions.** Calculating confidence intervals for one population proportion; performing hypothesis tests for one population proportion.

Subject Matter: (tentative schedule- subject to change)

The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor or see Blackboard.

Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Syllabus, course orientation, The Nature of Statistics</td>
</tr>
<tr>
<td>2</td>
<td>Organizing Data; <strong>Assessment 1</strong></td>
</tr>
<tr>
<td>3</td>
<td>Descriptive Measures; <strong>Assessment 2</strong></td>
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<tr>
<td>4</td>
<td>Probability; <strong>Assessment 3 and Assessment 4</strong></td>
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<tr>
<td>5</td>
<td>Probability &amp; Random Variables; <strong>Assessment 5</strong></td>
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<tr>
<td>6</td>
<td>The Normal Distribution; <strong>Assessment 6</strong></td>
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<tr>
<td>7</td>
<td>The Sampling Distribution of the Sample Mean; <strong>Assessment 7</strong></td>
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<tr>
<td>8</td>
<td>Confidence Intervals for One Population Mean; <strong>Assessment 8</strong></td>
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<tr>
<td>9</td>
<td>Hypothesis Tests for One Population Mean; <strong>Assessment 9</strong></td>
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<tr>
<td>10</td>
<td>Inferences for Population Proportions; <strong>Assessment 10</strong></td>
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<tr>
<td>11</td>
<td>Descriptive Methods in Regression and Correlation; <strong>Assessment 11</strong></td>
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<tr>
<td>12</td>
<td>Descriptive Methods in Regression and Correlation; <strong>Assessment 12</strong></td>
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<tr>
<td>13</td>
<td>Hypothesis Tests</td>
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<tr>
<td>14</td>
<td>Review and Final Exam</td>
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