MATH 1342 – D30 – Elementary Statistics – Fall 2020

Contact Information:

• Instructor: Jesse Taylor
• Office: MCS 219E
• Email: jesse.taylor@angelo.edu
• Our Classroom: Online (MCS 211 for tests)
• Meeting Times: Online (Mon, Wed, or Fri 10:00-10:50am for tests)
• Office Hours:
  o Due to COVID-19, all office hours will be held virtually this semester using Blackboard Collaborate.
  o 1:00pm – 3:00pm on Mondays and Wednesdays
  o 10:45am – 12:30pm on Tuesdays and Thursdays
  o Other times available by appointment (email me to set something up)

Required Textbook


Course Content

Selected sections from chapters 1-12 will be covered.

Homework

All homework in this class will be done online with MyStatLab. To register, go to www.mystatlab.com and click the button “Student” button under the heading “Register Now” on the right side of the screen. You must register using your ASU email account. The course ID for our class is taylor42032.

You will also need an access code, which should have come with your textbook. If you do not have an access code, you can purchase one online through the MyStatLab website. We will have homework assignments from each section covered in the textbook.

Please do not wait until the last minute to complete your homework assignments. Technology-based systems are sometimes unavailable and no late homework will be accepted. In general, homework will be due on Mondays, Wednesdays, and Fridays by 11:59pm.

Blackboard

All the instructional material for our course can be found in Blackboard and through MyStatLab. You will need to use both these resources and the textbook for every section we cover. Make sure you read the instructions in Blackboard for each section before you begin studying that section. All the general information about our course can be found here in the syllabus and on Blackboard.

Tests

We will have three tests and a cumulative final exam. Although the course is an online course, all our exams will be taken in person in MCS 211 on the campus of Angelo State University. Below is a table containing a schedule for the tests. If you have a conflict with one of the tests you must let me know at
least one week before the test is taken to ensure that you receive a make-up exam. The earlier you let me know, the better.

<table>
<thead>
<tr>
<th>Test</th>
<th>Material Covered</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>Chapters 1, 2, 3, and 4</td>
<td>Week of September 14-18</td>
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<tr>
<td>Test 2</td>
<td>Chapters 5, 6, 7, and 8</td>
<td>Week of October 12-16</td>
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<tr>
<td>Test 3</td>
<td>Chapters 9, 10, 11, and 12</td>
<td>Week of November 9-13</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Cumulative</td>
<td>10:30am-12:30pm, Friday Nov 20</td>
</tr>
</tbody>
</table>

It is expected that you will take your tests in person. However, in the event that you need to take a test online (for health reasons, quarantining, a campus shutdown, etc) you will need to do so using Respondus Lockdown Browser and must be video recorded via Respondus Monitor. Respondus requires a desktop computer or laptop (not a Chromebook) and a webcam. It is your responsibility to get this equipment if you need it. For best results, use an ethernet cable to connect to your Internet source instead of relying on Wifi (there are ethernet ports available to students in the campus library, for instance, or on your home router). There are instructions linked in the Blackboard course for Respondus (how to install, what to expect, etc).

**Grading**

Your grade in this class will be determined based on the following grading rubric.

- Homework: 15%
- The three regular exams: 20% each
- Final Exam: 25%

Your final letter grade in this class will be determined based on a ten-point grading scale.

**Course Syllabus Statement on Required Use of Masks/Facial Coverings by Students in Class at Angelo State University**

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.
Calculator
You will need a calculator for this class. Many of the calculations we will do are much too complex to do by hand. You may use any calculator for our class as long as it is not Bluetooth or WiFi enabled. The calculator I recommend is the Texas Instruments TI-30X IIS scientific calculator as it is inexpensive and robust, however you may use any calculator that cannot share files wirelessly.

Technology
Unless you have special accommodations documented with the Student Life office, no cell phones, tablets, laptops, games, or other electronic devices may be used at any time during our tests.

If ASU has to move to all online delivery due to a COVID-19 outbreak
In the event that ASU is forced to move online due to a COVID-19 outbreak, everything about our class except testing will remain unchanged. If we move online, our tests will be taken using Respondus. For more information regarding Respondus see the “Tests” section of this syllabus.

Study Aids
- The Math Lab offers free math help to all students enrolled in mathematics courses at or below the level of Calculus. The Math Lab is located on the third floor of the library (C302) and its times are listed below.
  - Monday – Thursday: 9:00am – 8:00pm
  - Friday: 9:00am – 12:00pm
  - Sunday: 4:00pm – 8:00pm
- The mathematics department maintains a list of students who are interested in tutoring privately. Students who are interested in obtaining private tutoring or serving as private tutors should visit the math department’s office for more information.
- Feel free to contact me for help. I will host virtual office hours regularly and am also available for one-on-one meetings if you have questions or want to discuss anything.

Notes
- If the university is unexpectedly closed for a scheduled class time, whatever was scheduled for that day and/or whatever was due that day will be scheduled and/or due on the next scheduled class day.
- All electronic correspondence will be sent to your ASU email account unless other arrangements are made.
- Good luck. I want you to succeed in this course. If at any point during the semester you feel as if you do not understand the material, please talk with me as soon as possible. An ounce of prevention is worth a pound of cure.
- All items and dates in this syllabus are subject to change as the semester progresses. Students will be notified in class of any changes, and the changes will not be updated within this syllabus.
Mathematics 1342 – Elementary Statistics

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. **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. **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. **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 statistics courses.

**Textbook**


**Course Content**

The following chapters including the particular sections listed are covered.

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.

11. **Inferences for Population Proportions.** Calculating confidence intervals for one population proportion; performing hypothesis tests for one population proportion.

12. **Chi-Square Procedures.** Chi-Square Goodness-of-Fit Test.

**Anticipated Schedule**

Below is a table containing an approximate guide to what we will cover during each week of the semester. These topics are subject to change.
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<th>Course Week</th>
<th>Topics</th>
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<tbody>
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<td>Introduction and Chapter 1</td>
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<td>2</td>
<td>Chapter 2</td>
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<td>3</td>
<td>Chapter 3</td>
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<td>4</td>
<td>Chapter 4</td>
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<td>Chapter 5 and Test 1</td>
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<td>Chapter 6</td>
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<td>Chapter 8</td>
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<td>9</td>
<td>Chapter 9 and Test 2</td>
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<td>10</td>
<td>Chapter 10</td>
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<td>11</td>
<td>Chapter 11</td>
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<td>12</td>
<td>Chapter 12</td>
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<td>13</td>
<td>Test 3</td>
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<tr>
<td>14</td>
<td>Review</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam, 10:30am-12:30pm, Friday November 20</td>
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**Student Disability Services**

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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu
Title IX

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU’s Title IX Coordinator:

Michelle Boone
Director of Title IX Compliance
325-486-6357
michelle.boone@angelo.edu

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. The full details can be found in ASU Operating Policy OP 10.19 Observance of Religious Holy Days.

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 Conduct Policies

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 Statement of Academic Integrity.

Plagiarism

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy 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 via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Centeriv.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

General Policies Related to this Course

- All students are required to follow the policies and procedures presented in these documents:
  - Angelo State University Student Handbookv
  - Angelo State University Catalogvi

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i Observance of Religious Holy Days: [http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)

ii Grading Procedures: [http://www.angelo.edu/content/files/14197-op-1011-grading-procedures](http://www.angelo.edu/content/files/14197-op-1011-grading-procedures)


iv ASU Writing Center: [http://www.angelo.edu/dept/writing_center/academic_honesty.php](http://www.angelo.edu/dept/writing_center/academic_honesty.php)


vi University Catalog: [http://www.angelo.edu/catalogs/](http://www.angelo.edu/catalogs/)