COURSE DESCRIPTION:
Statistics is the high school equivalent of a one semester, introductory college statistics course. In this course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests.


Prerequisite: Completion of Mathematics Texas Success Initiative (TSI) requirements.

Grading: Tests 70%, Quizzes 15%, Homework 15%

Your Responsibilities: This is a college course. You will be held to the same standards as college students. In order to be successful, you must do the following:
1. Attend class regularly.
2. Take notes.
3. Ask questions during class.
4. Do your homework.
5. Study for quizzes and tests.

Miscellaneous
1. Tests will be taken in MyLab. There are no make-up exams. To compensate for unavoidable circumstances, however, if it helps you, I will replace your lowest exam score with your final exam score. If you will be absent on a test or quiz day, you must plan to take the test or quiz prior to your absence. Exams are to be finished during class. No additional time will be given. On the day of a test or quiz, students must store all phones, iPads, and smart watches, etc. in an area designated by the teacher.
2. Daily work will consist primarily of traditional homework problems completed on a computer-based system. Late work is not accepted. If you are to be absent for a school activity, or other scheduled event, on the day an assignment is due, the assignment should be completed before you leave for the event. To compensate for unavoidable circumstances, however, I will drop the lowest homework score each 6-weeks.
3. Cell phone use in class is strictly prohibited.
4. Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available on the web at http://www.angelo.edu/forms/pdf/honorcode5.pdf.
5. Persons with disabilities which may warrant academic accommodations must contact the Student Affairs Office, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate
arrangements can be made.

Ms. Dallas A. Swafford, Director of Student Disability Services  
Houston Harte University Center,  
Suite 112  
Phone: 325-942-2047  
or by E-mail: dallas.swafford@angelo.edu

6. 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.

7. Plagiarism is a serious topic covered in ASU’s Academic Integrity policy viii 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 Centerix.

8. 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.

9. Other course rules and policies will be discussed in class.

**Student Learning Outcomes**

1. 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 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 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 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.

**Core Curriculum Student Learning Objectives**
1. Core Objective (Critical Thinking): Develop and demonstrate a logical position (i.e. perspective, thesis, hypothesis) that acknowledges ambiguities or contradictions. (CT2)

   Course Student Learning Objective: Students will calculate probabilities, find confidence intervals, and perform a variety of hypothesis tests.

   Assessment: Assessment exam that demonstrates CT2.

2. Core Objective (Communication): Develop, interpret, and express ideas through effective visual communication. (CS3)

   Course Student Learning Objective: Students will create, interpret, and draw conclusions from histograms, box plots, and scatter plots.

   Assessment: Assessment exam that demonstrates CS3.

3. Core Objective (Empirical and Qualitative Skills): Manipulate and analyze numerical data and arrive at an informed conclusion. (EQS1)

   Course Student Learning Objective: Students will use the facts, formulas, and techniques learned in this course to find regression equations; use regression equations to make predictions.

   Assessment: Assessment exam that demonstrates EQS1.