MATH 1342: 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

Margaret Franklin
Llano High School
Phone: 325-248-2200
Email: mfranklin@llanoisd.org

Major Course Requirements

Tests

We will have at least two tests per six weeks and a cumulative final examination. The exact dates and coverage of these tests will be specified in class. The final exam will be held as specified in the course schedule and it is cumulative.

Daily Work

Daily work will consist primarily of traditional homework problems completed either on paper or on a computer based system My Math Lab. The student will be required to purchase access to My Math Lab.

Quizzes

Unannounced quizzes will be given weekly during the class period.

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.

**Subject Matter**

We will be studying the basics of descriptive statistics, probability, and inferential statistics. The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor.

**Weekly Course Topics**

*Week 1* Introduction, Statistics Basics, Sampling, Variables and Data  
*Week 2* Data, Qualitative Data, Quantitative Data, Distribution Shapes  
*Week 3* Measures of Center, Measures of Variation, Five-Number Summary  
*Week 4* Populations and Samples, Probability Basics, Events  
*Week 5* Rules of Probability, Discrete Random Variables  
*Week 6* Normal Distribution, Standard Normal Curve, Normally Distributed Variables  
*Week 7* Assessing Normality, Sampling Error, Distributions  
*Week 8* Sample Mean, Estimating a Population Mean  
*Week 9* Confidence Intervals, Margin of Error  
*Week 10* Confidence Intervals  
*Weeks 11 & 12* Hypothesis Tests
Week 14 Chi-Square, Chi-Square Goodness-of-Fit

Week 15 Linear Equations, The Regression Equation, Linear Correlation

Weeks 16 & 17 Review and Final Exam

Required Texts or Readings


Honor Code

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.

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:

Ms. Dallas A. Swafford
Director of Student Disability Services
• 325-942-2047
• dallas.swafford@angelo.edu
Houston Harte University Center

Title IX Statement

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 Nicole Boone, J.D.
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.

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.

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 Center.

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 Handbook and Angelo State University Catalog