Mathematics 1342 – Elementary Statistics

Monday – Friday
6th Period, Room 112

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Conference: 4th Period

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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.

Course Description - MATH 1342 Elementary Statistics (3 college credits):
We will be studying the basics of descriptive statistics, probability, and inferential statistics. Since this class functions as both a high school junior/senior mathematics class and a dual credit college Statistics class, it will not only cover the Statistics TEKS 111.47, but also the Core Curriculum Student Learning Objectives used in Texas colleges.


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

Grading: Tests 50%, Quizzes 15%, Homework 10%, Final Exam 25%

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. If you will be absent on a test or quiz day, you must make arrangements to take the test or quiz prior to your absence.

2. Exams are to be finished on time – as instructed in class. No additional time will be given.

3. To receive credit for a question, you must show your work clearly, in order, and legibly.

4. If you turn in an assignment late, 10 points will be deducted per day that it is late. If you will be absent on the day an assignment is due, then the assignment may be turned in the first day you are back at school without penalty.

5. You will not be allowed to share calculators. You will also not be allowed to use calculators on your cell phone or I-Pad.
6. Cell phone use in class is strictly prohibited.

7. If you are absent, it is your responsibility to contact a classmate or me to find out what you missed.

8. 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.

9. 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

10. 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.