

South Plains College
Math 1342– Statistical Methods (3:3:0)
Course Syllabus
Spring 2017

Instructor: Diane Eagle
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:30 – 11:00 1:45 – 2:30	10:30 – 11:00 2:45 – 3:30	10:30 – 11:00 1:45 – 2:30	10:30 – 11:00 2:45 – 3:30	9:00 – 12:00

Prerequisites: Successful completion of MATH 0320 or 2 units of high school algebra.

Textbook: Elementary Statistics: A Brief Version, 7th edition, by Allan G. Bluman.

Supplies: Pencils, paper, straightedge, graph paper, and a scientific calculator (a graphing calculator is not necessary.) Calculators on cell phones, tablets, and other electronic devices will **NOT** be allowed during tests or in-class assignments. Arrive prepared to take notes every day.

Course Description: Collection, analysis, presentation, and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing.

Course Purpose/Rational/Goal: To provide a transferable course in the basic elements of statistical methods.

Student Learning Outcomes/Competencies:

Upon completion of this course and receiving a passing grade, the student will be able to:

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
2. Recognize, examine, and interpret the basic principles of describing and presenting data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.
5. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.
7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.

*Developed by the Coordinating Board and the Faculty of South Plains College's Math and Engineering Department.

Core Objectives:

Communication Skills:

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

Course Requirements: To maximize the potential to complete this course, a student should attend all class meetings, take notes and participate in class, complete all homework assignments and examinations including final examinations.

Course Evaluation: Your final grade will be determined by the average of 3 major tests (300 points) the comprehensive final exam (100 points) and homework or in-class assignments (100 points.) A total of 500 points are possible. The number of points earned will follow the grading scale below:

A	90 to 100	448 to 500 points
B	80 to 89	398 to 447 points
C	70 to 79	348 to 397 points
D	60 to 69	298 to 347 points
F	Below 60	0 to 297 points

The sum of points earned (out of 500) over the course of the semester will determine your overall average for this class. Please do not ask to curve test scores or to "bump" your final average.

Exams: Dates for the 3 major tests and comprehensive final exam are listed on the calendar. **There are NO makeup tests!** If you miss one of the 3 major tests, your final exam will count twice to replace the missing grade. A second missed test will be averaged as a zero. The final exam grade (if higher) will also replace the lowest major exam grade; however, if the final exam is lower than any of the 3 major exam grades, then it will only count once in the course average.

Homework Assignments: Homework is assigned from each section covered, and time will be available at the beginning of each class to ask questions. Consistently working problems reinforces the skills and concepts presented, and is essential for success in this course. In addition, many test questions come directly from the assigned problems and examples worked in class. Homework assignments will be collected the following class period. All steps/work must be shown and the answer clearly indicated to receive credit. Do not submit "answer sheets." In the event of an absence, you must email your assignment to me on or before the day it is due. **Absolutely NO late homework assignments will be accepted.** Daily grades comprise 100 points, or 20%, of your overall average.

Tutoring: Students can obtain free tutoring in room M116 in the math building on the South Plains Campus in Levelland or in Building 2 at the Reese Center. Tutoring schedules will be posted on campus. Please remember to sign in when you seek the help of a tutor in each of these places.

Additional Resources: A student solution manual containing worked out solutions for odd-numbered problems is available for purchase. PowerPoint slides accompanying this textbook are posted on Blackboard and handouts may be printed. Additional free tutorial videos are also available at the following sites: <http://patrickjmt.com/>, <http://www.mathtv.com/>, and <http://www.khanacademy.org/>.

Bonus Points: Do NOT ask for extra credit. Typically, students who request extra credit help are those who are not completing the minimum requirements of the class to begin with. Occasionally, tests may include a bonus problem, or a bonus problem may be assigned to complete outside of class. Opportunities for extra points may also be posted on Blackboard.

Attendance Policy: Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or fail to sign the attendance sheet may be counted absent. Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. **Any student who misses 3 consecutive classes or exceeds 5 absences throughout the semester will be administratively dropped and receive a grade of X or F.** Students wishing to drop this class must see the registrar by Thursday, April 27, 2017 to officially withdraw and receive a grade of W.

Classroom Civility: Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Turn off all cell phones and other electronic devices **before** entering the classroom. The instructor reserves the right to ask a student to leave if his/her cell phone is left on and disrupts the class. Refrain from using offensive language, talking loudly or off-topic, working on outside assignments, chewing tobacco products, or otherwise being disruptive in class. Food and/or drinks are NOT allowed in the classroom.

Academic Honesty: Students are expected to uphold the ideas of academic honesty. Academic dishonesty includes, but is not limited to, cheating on tests, collaborating with another student during a test, copying another student's work, using materials not authorized, and plagiarism. **Use of a graphing calculator, cell phone, or other electronic device during any in-class assignment or exam will result in a grade of zero.** Leaving the classroom during an exam will not be permitted. Students who do not follow the academic honesty policy will receive a grade of zero for the assignment, may be dropped from the course with an F, or face possible suspension from the college.

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

PLEASE NOTE: Texas SB 11 (Campus Concealed Carry) does NOT go into effect for community colleges until August 1, 2017.