

South Plains College
Math 1342– Statistical Methods (3:3:0)
Course Syllabus
Fall 2019

Instructor: Diane Eagle

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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
1:30 – 2:30 5:00 – 5:30	1:30 – 2:30	1:30 – 2:30 5:00 – 5:30	1:30 – 2:30	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. This textbook is available on reserve in the library.

Supplies: Pencils, paper, straightedge, graph paper, and a scientific calculator (a graphing calculator is not necessary.) Calculators on cell phones, tablets, or other electronic devices will **NOT** be allowed during tests or in-class assignments. Arrive on time and come 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. Note: This course satisfies a 020 Mathematics Core Curriculum requirement.

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.

General Education Core Objectives:

1. **Critical Thinking:** Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.
2. **Communication Skills:** Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
3. **Empirical and Quantitative Skills:** Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

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

Grading Scale:	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

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. Focus your effort on being able to complete the problems without any outside resources. 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.** Homework grades comprise 20% of your overall average.

Bonus Points: Students will have the opportunity to make corrections on **one** test (final exam not included) of their choosing, for up to 50% of the points missed. Corrections are due the following class period after the test is handed back. Test corrections must have complete and correct solutions and be turned in on a separate sheet of paper **with** the exam. Additional homework assignments may also be collected to supplement points earned. Bonus points add into the cumulative points earned.

Additional Resources: Blackboard is the online management system used for this course. Your grades, along with the course syllabus, handouts, reviews, and other resources can all be accessed through Blackboard. PowerPoint slides accompanying this textbook are available on Blackboard and handouts may be printed. Opportunities for additional points are occasionally posted. **Be sure to check Blackboard and your SPC email account regularly for class announcements and updates.**

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.

Attendance Policy: Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or **access their cell phones during class**, 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, November 14, 2019 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. **Use of cell phones during class will not be tolerated! You will receive ONE verbal warning, after which you will be asked to leave and receive a zero for that day's assignment.** 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 devices or apps 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, and may be dropped from the course with an F, or face possible suspension from the college.

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Disabilities 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.

Non-Discrimination Statement: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number: 806-716-2360.

MATH 1342.201– FALL 2019

Week	Monday	Wednesday
1	Aug. 26 Syllabus, Chapter 1	Aug. 28 Chapter 1 (cont.)
2	Sep. 2 LABOR DAY	Sep. 4 2.1 p. 51 1–12 all, 15–24 by 3's
3	Sep. 9 2.2 p. 65 2, 6, 8, 12, 14, 16 2.3 p. 90 4, 8, 10, 12, 14, 18	Sep. 11 3.1 p. 130 2–30 by 4's
4	Sep. 16 3.2 p. 151 6, 10, 12, 14, 20, 24, 30	Sep. 18 3.3 p. 167 12, 14, 16, 22–30 even 3.4 p. 180 8–14 evens
5	Sep. 23 4.1 p. 206 10–40 evens	Sep. 25 TEST 1 – chapters 1, 2, 3
6	Sep. 30 4.2 p. 214 6–26 evens	Oct. 2 4.3 p. 230 6–50 by 4's
7	Oct. 7 4.4 p. 243 4–64 by 4's 4.5 p. 253 4–14 evens	Oct. 9 5.1 p. 271 7–12 all 5.2 p. 280 2–14 evens, 18
8	Oct. 14 5.3 p. 291 4–32 by 4's	Oct. 16 6.1 p. 314 8–40 by 4's 41–50 all
9	Oct. 21 6.2 p. 329 2–30 by 4's	Oct. 23 6.3 p. 344 8–24 evens
10	Oct. 28 7.1 p. 371 10–26 evens 7.2 p. 379 6–16 evens	Oct. 30 TEST 2 – chapters 4, 5, 6
11	Nov. 4 7.3 p. 387 4–20 by 4's	Nov. 6 8.1 p. 418 11–14 all
12	Nov. 11 8.2 p. 427 2–22 evens, omit 18 8.3 p. 441 7, 8, 13, 14, 18, 19	Nov. 13 8.4 p. 449 6–20 evens
13	Nov. 18 9.1 p. 484 6–14 evens 9.2 p. 493 4, 8, 12, 16	Nov. 20 2.4 p. 102 6, 8, 10, 12 10.1 p. 553 TBA
14	Nov. 25 TEST 3 – chapters 7, 8, 9	Nov. 27 THANKSGIVING
15	Dec. 2 10.2 p. 561 TBA 10.3 p. 580 TBA	Dec. 4 REVIEW
16	Dec. 9 FINAL EXAM 10:15 am – 12:15 pm	Dec. 11 NO CLASS

*****Last day to drop is Thursday, November 14, 2019*****