

SOUTH PLAINS COLLEGE

MATH 1342.002 – Statistical Methods

MW 9:30 – 10:45 PM M124

Fall 2019 Course Syllabus

Instructor: Rebecca Darby
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Blackboard: <https://southplainscollege.blackboard.com>

Office Hours: As listed below or by appointment.

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

Textbook (required): **Elementary Statistics: A Brief Version**, 7th edition, by Allan G. Bluman. McGraw-Hill. ISBN-13: 978-0-07-772058-2.

Supplies: You will need pencils, notebook paper, and a folder or binder. A scientific calculator, preferably a TI-83 or TI-84, is required. **Calculators on cell phones or other electronic devices are not allowed.**

Blackboard: Information and resources pertaining to this course are available on Blackboard. I'll be posting informative announcements regularly on Blackboard and the syllabus, instructor contact information, and all course resources are stored there. Assignments and due dates, quiz dates, and exam dates are posted on the Blackboard calendar. I'll be posting your grades in the gradebook on Blackboard so that is where you can see what your grade is in the course at any time. You should get into the habit of checking Blackboard daily for pertinent information.

Course Description: This course is a study of the methods of analyzing data, statistical concepts and models, estimation, tests of significance, introduction to analysis of variance, linear regression, and correlation.

Course Purpose: The purpose of the course is to provide a fundamental background in statistics that can be used as a basis for studies in many fields. This course will meet the requirement for mathematics in the core curriculum and for any major that requires an elementary statistics course.

Learning Outcomes: Upon successful completion of this course, the student will demonstrate mastery of the following objectives.

- Represent raw data using frequency distributions.
- Represent raw data using polygons, ogives, histograms, and pie charts.
- Calculate measures of central tendency, variation, and position for both grouped and ungrouped data and interpret in writing the significance and meaning of the calculations.
- Calculate coefficients of variation and skewness and interpret in writing the significance of the calculations.
- Calculate classical and empirical probabilities.
- Apply binomial, Poisson, and normal distribution properties to calculate probabilities and interpret in writing the significance of the calculations.

- Calculate mean, variance and standard deviation of probability distributions and interpret in writing the significance of the test results.
- Evaluate a hypothesis testing situation to determine the appropriate test to be used.
- Use parametric and non-parametric tests for hypothesis testing and interpret the results and significance in writing.
- Calculate simple and multiple regression equations and use equations and use the equations to make predictions.
- Calculate coefficients of correlation, determination, and non-determination and interpret in writing the significance of the calculations.
- Use a computer statistics program and/or a statistical calculator to help with calculations.

Core Objectives:

The course has the following objectives.

- **Communication:** Effectively develop, interpret, and express ideas through written, oral, and visual communication.
- **Problem solving:** Make sense of problems, develop strategies to find solutions, and persevere in solving them.
- **Reasoning:** Reason, model, and make decisions with mathematical, statistical, and quantitative information.
- **Evaluation:** Critique and evaluate quantitative arguments that utilize mathematical, statistical, and quantitative information.
- **Technology:** Use appropriate technology in a given context.

Important Dates:

Classes begin on August 26th. Other important dates are listed below.

- **September 2** Labor Day. No classes.
- **November 14** Last day to drop fall semester courses.
- **November 27** Thanksgiving Holiday. No classes.
- **December 11** Final Exam (8:00 AM – 10:00 AM)

Attendance:

Class attendance is expected, not optional. Class attendance may be taken at any time during the class period, so please do not be late or leave early. Leaving early and being tardy will be considered 1/2 absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed five absences (**for any reason**).

*There will be opportunities to earn bonus points on exams for excellent attendance.

Homework & Class Work:

Homework will be assigned regularly and each assignment must be submitted at the beginning of class on the day that it is due. Late homework will not be accepted. Classwork will be given and graded as well. *There will be opportunities to earn bonus points on exams for homework diligence.

Quizzes:

Quizzes will be given at the beginning of the class period on Wednesdays. No quizzes will be given during an exam week. Thus, there will be no quiz on the following Wednesdays: September 18, October 9, November 6, November 27 (Thanksgiving Break), and December 4. No make up quizzes will be given.

Exams: There will be four unit exams given during the semester and a comprehensive, departmental final exam given at the end of the semester. There are no exemptions for the final exam. If you are going to miss a unit exam, contact your instructor immediately, preferably prior to the exam. Makeup exams are given only under extremely rare and documented circumstances. Once you begin an exam, you cannot leave the room until the exam is submitted for grading.

Grading Scheme: Your grade in the course will be comprised of scores from the following categories.

- Exams (Each exam will count 15% for a total of 60%)
The following exam dates are tentative. Any changes to these dates will be announced in class.
 - Exam 1 Wednesday, September 18
 - Exam 2 Wednesday, October 9
 - Exam 3 Monday, November 4
 - Exam 4 Monday, December 2
- Quizzes (10%)
- Homework/Classwork (10%)
- Comprehensive Final Exam (20%)
The final exam will take place on Wednesday, December 11 from 8:00 – 10:00.
- *There will be opportunities to earn bonus points on exams for excellent attendance and homework diligence.

This course and its grade will be recorded on your official transcript. Grades will be posted on Blackboard throughout the semester.

Where to Get Help: Math can be challenging occasionally. Here are ways in which you can receive quality assistance.

- I am available during my office hours and by appointment. Please email me or come to see me for assistance if needed.
- **FREE** tutoring is available in M116 (math building) on the Levelland campus and in RC206 (building 2) on the Reese campus.
- **Khan Academy** is a great free online resource for students who need help with math. The website has excellent instructional videos on every math topic.

Responsibilities & Expectations:

1. Attend class regularly, be on time, and be prepared to learn.
2. Be attentive, take notes, and fully participate in class.
3. **DO ALL HOMEWORK.** Fully invest yourself in the homework process so that you can maximize your potential to be successful in the course. Do your own work, show all work, and complete the homework early enough that you can seek help if needed.
Always turn in your homework on time.
4. Food, drink, and tobacco products are not allowed in class, with the exception of bottled water.
5. Cell phones and any other electronic devices must be silenced and put away while you're in the classroom.
6. Reasonable standards of decency apply to the college community. The student should dress in a manner that does not distract from the academic atmosphere. Revealing attire or clothing carrying obscene or offensive slogans is not permitted. In all academic buildings, classrooms, offices, the Student Center, and dining facilities, students are required to wear shirts and shoes. Refrain from using offensive language, talking loudly or off-topic, or working on outside assignments.
7. Be respectful to others in the classroom and assist in maintaining an optimum learning environment for all. Any student who disrupts the learning environment will be asked to leave and may be dropped from the course.

Academic Integrity: It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. Cheating is dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, or alteration of grade records. **Cheating of any kind will not be tolerated.** Any student found to be cheating on an assignment/assessment will receive a zero for that assignment/assessment and may be dropped from the course with an F. In addition, that student will 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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

Campus Concealed Carry: **Texas Senate Bill - 11** (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Sexual Misconduct: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lclevinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.