South Plains College Math 1342 – Statistical Methods Course Syllabus 2023-2024

Instructor: Danae Burton Room: 105 E-mail: <u>danaeburton@levellandisd.net</u>

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

Prerequisite: Minimum score of 350 on the TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0337.

Credit: 3 Lecture: 3 Lab: 0

Textbook: In this course, we will utilize a free online textbook provided through openstax. The link to the textbook can be found here:

https://openstax.org/books/introductory-statistics/pages/preface

The book can also be found by going to openstax.com, finding the math books, then clicking on Introductory Statistics.

Supplies: Each student will need a graphing calculator (assigned by the school), two spiral notebooks (or one multi-subject notebook), a pen or pencil with which to take notes, and a folder to keep graded assignments and tests in.

Communication: The instructor can be reached through school email, or through our Google Classroom section.

Technology: Since students in a year-long dual credit class are not enrolled at SPC until the spring semester, this class will use Google Classroom to access all instructional materials.

Student Learning Outcomes: 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.

Course grade: Each student's grade will be calculated as follows:

Daily Work	10%
Assignments	20%
Quizzes	20%
Exams	40%
Final Project	10%

Exams: We will have four in-class exams. Exams may have a combination of vocabulary words, multiple choice, and short response questions. Exams can be made up outside of class if missed due to excused absence or being sick.

Homework and class assignments: Homework is assigned from each section covered, and time will be available during class to ask questions. Consistently working problems reinforces the skills and concepts presented, and is essential for success in this course. Homework assignments will be due either two or three class days from the day they are assigned. Homework is due by 4pm on the due date. Late work will be deducted 10% each day it is late up to three days; after three days, the homework will receive a zero.

*Note that this syllabus is subject to change. Any changes made by the instructor will be reflected in the syllabus uploaded in Google Classroom.

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.

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.

Nondiscrimination Policy: 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.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.