



NORTHWEST FLORIDA STATE COLLEGE

STA 2023 Course Syllabus

Course Name: Statistics

Course Number: STA 2023

Section (CRN): 10393

Credit Hours: 3

Instructor Name: Ryan Adams

Instructor Office Location: NV-350 210

Instructor Email: adams5@nwfsc.edu

Course Curriculum

In this course students will utilize descriptive and inferential statistical methods in contextual situations, using technology as appropriate. The course is designed to increase problem-solving abilities and data interpretation through practical applications of statistical concepts. This course is appropriate for students in a wide range of disciplines and programs.

Broad Goals

The goal of this course is to (1) introduce the student to basic statistical terms and concepts; and (2) provide students with the skills necessary to apply statistical analysis and reasoning to real-world applications.

Objectives

Student Learning Outcomes:

- Students will visualize and summarize data using descriptive statistics.
- Students will apply basic probability concepts to draw reasonable conclusions.
- Students will employ concepts of random variables, sampling distributions, and central limit theorem to analyze and interpret representations of data.
- Students will choose an appropriate method of inferential statistics, including confidence intervals and hypothesis testing, to make decisions about a population based on sample data.
- Students will model linear relationships between quantitative variables using correlation and linear regression.
- Students will use calculators and/or software to apply statistical analysis and reasoning to real-world applications.

Expectations of the Instructor and Course

- a. Office Hours: I am available during scheduled office hours at least 10 hours each week. I can also be available at other times. You can contact me via email (preferred) at adams5@nwfsc.edu or phone 850-585-4639 to schedule an appointment. My office hours will be posted on my office door and in Canvas once the semester begins.
- b. Expected email/voicemail response times: I anticipate responding to inquiries and questions within 24-48 hours of receipt, except on weekends and holidays.
- c. Learning Management System Usage: Many (if not all) assignments in this course are completed and/or submitted via ALEKS and/or Canvas. Access to a computer is therefore required for this course, with Chrome being the recommended browser. Canvas and ALEKS list minimum computer specifications and supported browsers to ensure compatibility. Canvas and ALEKS resources are available for students to learn more about these systems. Students have free access to computers at all campuses.
- d. ALEKS: This system is utilized for assignments and/or assessments and provides students with immediate feedback in learning mode.

Expectations of the Student

- a. ACADEMIC INTEGRITY: Active and honest engagement in academic pursuits contributes to an environment conducive to optimal learning, aligning with the college's mission. Conversely, academic misconduct, such as cheating or plagiarism, undermines the integrity of the educational atmosphere and will not be tolerated. "Cheating" encompasses any unauthorized aid in completing coursework. Depending on the severity and frequency of such misconduct, sanctions may range from receiving a failing grade or zero on a test, assignment, or activity, to course failure, or possible suspension or dismissal from the program or college.
- b. Attendance Policy: Regular attendance and participation are significant factors that help to promote success in college. Students are expected to attend ALL class meetings of all courses for which they are registered. Students who stop attending class, or are not able to pass the course due to attendance expectations stated in the syllabus, might receive a failing grade, which may affect the receipt of federal aid in subsequent courses. Students traveling for college-approved activities will not be penalized academically but will be responsible for missed work. Students are expected to attend all of their scheduled classes, as attendance is one of the strongest predictors of success. Therefore, 7.5 hours of missed class may result in a penalty of 10% (a percentage penalty assessed on the final course grade).

How Student Performance Will be Measured

This course uses various summative assessments to measure student performance toward the student learning outcomes listed above. Grading Scale: A (100-90), B (89-80), C (79-70), D (69-60), and F (59-0).

A breakdown of the final grade is shown below.

Concept Checks: After watching the video and taking notes, there will be a concept check after each section. This small assessment will act as quick check to see if you have important concepts down. You have unlimited attempts at the concept checks. It is recommended to go through them one more time before the tests.

Discussion Post: Discussion posts will be assigned during most weeks. Respond to the prompt and be sure to add value to any replies you have to give.

Homework: For each section we cover, I will have a set of problems to be done on ALEKS. The problems should be done on notebook paper or a notebook so that I can look at your work if there are any issues. Due dates for homework will be posted in ALEKS and Canvas. You should be able to attempt each question 3 times. If you use all 3 attempts, you can try as similar problem. Problems can be worked after the due date; they will be graded with a 15% penalty. At the end of the semester, the 3 lowest homework grades will be dropped. You should work on all the homework since you will be responsible for the material.

Tests- There will 4 tests and a final during the semester. They will be on Canvas using the Respondus Lockdown Browser and Respondus Monitor. Show all work on notebook paper and/or graph paper. When you are done taking your exam, you must submit your work within 15 minutes of completing the exam to receive any credit for the test. Make sure your work is scanned and is uploaded as one PDF file. We will use the class time to take the test and final. Late test (and final if approved to take it late) will take a 20-point penalty.

Grade Breakdown

| Final Grade | % | Letter Grade | % |
|-----------------------|----|--------------|--------------|
| Notes | 5 | A | 100 – 90 |
| Concept Checks | 5 | B | 89 – 80 |
| Discussion Posts | 5 | C | 79 – 70 |
| Connect Math Homework | 15 | D | 69 – 60 |
| Tests | 50 | F | Less than 60 |
| Final | 20 | | |

***Keep in mind the following:

- I will drop the 3 lowest homework grades.
- To improve your test average, you may submit test corrections for the test you did the worst. Make sure to rework each problem completely and submit the corrections on the day of the final. Completing this correction will give you half the points back from the maximum on that test if you attempted all the tests in the semester. (The maximum for a late test is 85)
- If you miss one test, your final exam will take the place of the missing test. Missing subsequent tests will give you a zero for each one.
- You will be exempt from the final exam if you have at least a 90 average in notes, concept checks, discussion posts, and homework and scored at least a 94 on each test (without test corrections).