



NORTHWEST FLORIDA STATE COLLEGE

STA 2023 Course Syllabus

Course Name: Statistics

Course Number: STA 2023

Section (CRN): 10027

Credit Hours: 3

Instructor Name: William P. Cast

Instructor Email: castw@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: By appointment.
- 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 must attend all classes. If a student cannot make a class, then he or she must contact me to be an excused absence. Students who stop attending class, or are not able to pass the course due to attendance expectations stated in the syllabus, may receive a failing grade which may impact 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, a substantial number of missed classes may result in a penalty of **20%** (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).