

2024-2025 Statistics Procedures

Plano West Statistics Team

Puja Garg
puja.garg@pisd.edu

Nicole Mayer
nicole.mayer@pisd.edu

Olivia Weinberg
olivia.weinberg@pisd.edu

Welcome to Statistics! Mrs. Garg, Mrs. Mayer and Ms. Weinberg are excited you have chosen to take Statistics! The following information will help us get started.

Daily Grades (40%):

- **Homework:** Homework is assigned after most lessons. Some assignments are graded, others are not. Assume all homework is graded since they will be randomly graded from your packet. **Doing homework consistently is ESSENTIAL for mastering the topics you will be learning.** You are responsible for checking your daily work using keys provided by your teacher and those posted on google classroom.
- **Quizzes:** We will have periodic quizzes over each topic. These will generally be administered in groups. Quizzes count double in the Daily Work Category. Groups are usually randomly assigned but up to teacher discretion.

Tests (60%): Each unit will conclude with a unit test. Test questions are primarily focused on topics in the unit; however, knowledge and skills from prior units may be needed to solve some problems. Tests are made up of multiple choice, true/false and free response questions. Free response answers must meet specific detailed requirements in order to receive full credit.

- If you have an **unexcused absence** on test day, you will only have one attempt at the test.
- If you have an excused absence on testing day, you will be required to take the test the next time you are in class. You will be responsible for the new material that will be missed while you are making up the test.
- If you are absent just on the review day, you will be required to take the test on the originally planned testing day (the review key will be located on google classroom).

Retests: In order to be eligible to take the retest, you will have to pass (minimum of 70%) a My Math Lab assignment in order to be eligible to take the retest. If you do not pass them My Math Lab assignment, then you will be ineligible for the retest. The MML assignments are generally open for several days for students to complete on their own time. You will have a maximum of 100 attempts in order to pass the assignment.

Digital Course Tools and Resources: *Login information will be provided for all of the following.*

- **Google Classroom** – PowerPoints, notes, homework, and additional resources will all be available through your teacher’s unique Google Classroom. You must join your instructor’s GC for your specific class period.
- **My Math Lab** – Additional online practice and will be required for retesting. Once you have created a MML account, we suggest that you write down your password to prevent locking your account.
- **TI-84 Calculator** – We will periodically use TI-84 (or equivalent) graphing calculators to solve problems. If you do not have a graphing calculator, there are numerous online graphing calculator emulators. Many students use the Calculate84 app on their cell phone. If you still would like to check out a graphing calculator, you can ask your teacher for the form.

Tutoring: Each teacher will have regularly scheduled tutorial times every week during which you can ask questions about statistics concepts and assignments. You are encouraged to primarily contact your teacher when you need assistance; however, you can also contact one of the other Statistics teachers during their scheduled tutorial times. The tutorial schedule will be posted in Google Classroom and outside each statistics classroom and on the QR link for all math tutorials. DO NOT wait to get tutoring if you are struggling!

Statistics Course Description

The Course: Statistics is the study of variability and how that variability allows you to make predictions and decisions. This course will be unlike any other “math” course you have ever taken math. Why? Math is not the focus of this course. We will do some “math” in the form of calculating probabilities, solving for sample size or introducing concepts such as standard deviation. However, computation in and of itself is not the focus of this course. The focus of this course is concepts, problem solving, statistical reasoning as well as written and verbal communication.

What will we do in class? There will be days where we introduce topics and take notes, days where we do activities to uncover the nature of statistics, and other days where we take assessments. This is an activity-based course. We want you to learn by doing, not just by listening. We will collect data. We will talk about the correct way to gather data. We will analyze the data.

What do I need to be successful in this course? Mathematically? Not much. The toughest algebraic problem you need to solve in this course is similar to this:

$$0.25 = 1.96 \sqrt{\frac{0.36(0.64)}{n}}$$

If you can handle that, your next priority is the memorization of a large number of terms, symbols and definitions. This course is focused on large conceptual ideas. We also focus on how to communicate our understanding, both verbally and in writing. We do a large amount of writing in this course in order to summarize our findings and decisions.

What should I do when I’m done? Upon successful completion of this course you would be prepared to take a university-level, Introduction to Statistics course. The university course would not be a repeat of this one as it would go much deeper into each topic and cover more topics.

Can I take the AP Statistics Test in May? Anyone can sign up for the AP Statistics test if you want to pay the fee, but it is not recommended. This course is in no way designed to completely prepare you for the AP Statistics test. We will not cover all the topics the test requires. The AP course is also much more rigorous than this course, and the depth and rigor of the AP course is what truly prepares students for the AP test. If you desire to take the AP Statistics test, you should enroll in AP Statistics quickly.

Topics Covered:

1st Semester:

- Representing Data Graphically and Numerically
- Probability
- Experimental Design

2nd Semester:

- Sampling Design
- Binomial and Normal Distributions
- 1-Sample Inferences (Confidence Intervals and Hypothesis Testing) with Proportions
- 1-Sample Inferences (Confidence Intervals and Hypothesis Testing) with Means
- 2-Sample Inferences (Confidence Intervals and Hypothesis Testing) with Proportions
- 2-Sample Inferences (Confidence Intervals and Hypothesis Testing) with Means
- Linear Regression