



Statistics

Grand Haven High School



Course Number: E56

Grade Level: 9-12

Credits : 0.5

Prerequisite Courses : Successful completion of Honors Algebra II A & B or Algebra II A & B

Course Description

This is a one trimester class focusing on ability to use statistical methods to interpret real-life data from newspapers, magazines, and other sources. Covers probability theory, the binomial probability distribution, normal distributions, sampling distributions, estimation, hypothesis testing, regression and correlation. A graphing calculator is strongly recommended.

Course Objectives

Statistics is the science of collecting, organizing, analyzing, and interpreting data in order to make decisions. First we will review and build upon our knowledge of Descriptive Statistics. Next will be a study of Probability and Probability Distributions. Then we will focus on the third unit of Statistical Inferences.

Student Expectations

Students are expected to be active participants in their education. You will be asked to complete problems on the board, participate in class discussions, complete all assigned work and use best effort on quizzes and tests. Students should seek additional help as needed for you to understand the material. Our classroom should be one where all students are able to participate and feel comfortable doing so. Students are expected to obtain a graphing calculator for this course, see teacher for suggested model. A notebook specific to math is also encouraged.

Communication

Students are expected to regularly monitor their progress through the Parent Internet Viewer and teacher blog sites. Parents and students are encouraged to contact teachers through email or phone with any questions or concerns.

Building Behavioral Expectations

TEAM GH ... One Team, One Family, One Grand Haven. Be Kind. Always.

It is our expectation that ALL GHHS students, staff and parents will ... always give their best **EFFORT** in everything that they do, work hard to be **INCLUSIVE** of each other, show **RESPONSIBILITY** in class, the hallways, cafeteria and at events, and **WORK TOGETHER** at all times!

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Grading Policy

Assignments (20%)

I expect that all students will attempt all homework problems. This means that appropriate drawings and work are required to receive full credit, not just a number or a blank space. Credit will be given based on completion, not right or wrong answers. Homework will not be accepted late unless you had an excused absence. It is your responsibility to check to make sure that your homework is correct, or if it is incorrect, to ask questions during our correction time in class so that you understand the material.

Assignments will also include in-class activities. These may be individual or in small groups. Again all work needs to be shown. Behavior during in-class tasks may impact your grade.

Quizzes (30%)

We will have several different types of quizzes:

Homework quizzes – an open-note quiz over some of the problems from the previous evening's homework.

Pop quizzes – unannounced quizzes over recent material

Cumulative quizzes – announced quizzes, usually over multiple days' worth of material (for example, several sections of a chapter)

Tests (50%)

Tests will be given at the end of each chapter or unit, and will be cumulative over the material for the semester. Students who were absent the day before the test (review day) are still expected to take the test. Students who were absent for multiple days before the test should speak to me about how they plan to make up the material.

Scope and Sequence

This semester we will explore:

Setting up a statistical study

Interpreting statistics commonly found in life

Making appropriate graphs or data displays

Using data displays to interpret data

Measures of central tendency and variation

The normal distribution

Probability and its relationship to statistics

Central Limit Theorem

Confidence Intervals

Hypothesis Testing

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