Statistics

Open to any grade level after successful completion of Integrated Math 3 (College Prep or Honors) (10 Credits)

- *Meets high school graduation requirement for math credits*
- *Meets the UC/CSU subject area "C-Mathematics" requirement*

General Information

Description

In **Statistics** students will learn concepts such as

- Graphically displaying and interpreting data.
- Probability, correlation, and regression.
- Statistical significance and inference.

Expectations and Goals

Students should have:

- A "C" or better in Integrated Math 3 College Prep or Honors

Students entering Statistics should already have a good understanding of the following concepts:

- Basic math skills, especially solving for variables in equations.
- Identifying slope from graphs, equations, and word problems.
- Students should also have strong reading skills to be able to understand and interpret a variety of word problems and explanations of concepts.

Students entering Statistics should also be able to solve problems such as

Equation Problem:	Word Problem:
Given $z = \frac{x - \mu}{\sigma}$ and z=1.6, $\mu = 1.1$ and $\sigma = 0.025$. Find x.	Given the following data set, find the mean and the median. 2, 5, 3, 7, 5, 8, 6
Graphing Problem: Display the data in the word problem as a histogram or a bar chart.	

Students entering Statistics are expected to do the following:

- Have a desire to learn this subject.
- Attend and participate in class every day.
- Thoroughly complete homework and reading assignments.
- Work in groups.
- Seek help when needed.

Estimated Homework

Students will be expected to send about ½ hour to 1 hour outside of class on homework for each class period. (This is a general guideline for planning and scheduling purposes. A student's individual ability level and competency may affect the actual preparation times needed.)

There may also be projects such as
- Gathering, displaying, and analyzing data.
- Group activities and labs to collect data and interpret results.

This Class Is Best For…

This course has an emphasis on the mathematics of statistics. While analysis will be taught, it is not the focus of the course. Tests of significance and inference testing are also developed.

Students will participate in a variety of activities and will find that there is more reading than in previous math courses.

Course Materials

Required Materials

Textbook: *Statistics and Probability with Applications, 3rd edition.*