

## **PROBABILITY & STATISTICS**

Grade level: 9,10, 11, 12

Credit: 1.0

Prerequisite: Algebra 1

Probability, Statistics, and Data Analysis is a course in which students learn the fundamental principles of probability and statistics and apply these principles to data analysis. Students are expected to install and utilize free computer software for manipulating data.

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### **Probability & Statistics Lessons**

#### **Teacher Message**

**LESSON 01: Introduction to Statistics**

**LESSON 02: Data Collection**

**LESSON 03: Univariate Data Displays**

**LESSON 04: Interpreting Data (Center, Spread, Shape)**

**LESSON 05: Interpreting Data (Position)**

**LESSON 06: Scatter Plots**

**LESSON 07: Correlation**

**LESSON 08: Predictions**

**LESSON 09: Introduction to Probability**

**LESSON 10: Classical and Empirical Probability**

**LESSON 11: Probability Distributions**

**LESSON 12: Other Probability Distributions**



**LESSON 13: Introduction to the Normal Distribution**

**LESSON 14: The Normal Curve**

**LESSON 15: Probability of a Normally Distributed Variable**

**LESSON 16: Central Limit Theorem**

**LESSON 17: Normal Approximation**

**LESSON 18: Confidence Interval**

**LESSON 19: Hypothesis Testing**

**LESSON 20: Hypothesis Testing (continued)**

**LESSON 21: Evaluating Statistical Studies**

**LESSON 22: Skills Assessment**

