



## AP Statistics Year at a Glance

### Scope and Sequence 2022 - 2023

**Please Note:** All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended timeline and sequence to be used voluntarily by teachers for planning purposes. Specific question regarding when content will be addressed in a specific course are best answered by the individual teacher.

### Course Resources

#### Publisher Resource:

The Practice of Statistics 6e, Bedford, Freeman & Worth Publishing Group LLC (Clever – use your active directory; does not support Internet Explorer)

#### Supplemental Resources:

[Khan Academy](#) (does not support Internet Explorer)

### In AP Statistics, instructional time will emphasize four areas:

- (1) Selecting Statistical Methods, selecting methods for collecting and/or analyzing data for statistical inference.
- (2) Data Analysis, describe patterns, trends, associations and relationships in data.
- (3) Probability and Simulation, use probability and simulation to explore random phenomena.
- (4) Statistical Argument: develop an explanation or justify a conclusion using evidence from data, definitions, or statistical inference.

Quarter 1 (August 10 – October 14)

### Chapter 1: Data Analysis

Students will describe data presented numerically or graphically and construct numerical or graphical representations of distributions as well as calculate summary statistics.



## AP Statistics Year at a Glance

### **Chapter 2: Modeling Distributions of Quantitative Data**

Students will calculate summary statistics, relative position of points within a distribution and compare distributions of points within a distribution.

### **Chapter 3: Exploring Two-Variable Quantitative Data**

Students will describe data presented graphically and numerically, construct numerical or graphically summaries of distributions as well as calculate summary statistics, correlation, and predicted response.

### **Chapter 4: Collecting Data**

Students will identify key and relevant information to answer a question or solve a problem as well as describe appropriate method for gathering and representing data.

## Quarter 2 (October 18 – December 21)

### **Chapter 4: Collecting Data**

Students will identify key and relevant information to answer a question or solve a problem as well as describe appropriate method for gathering and representing data.

### **Chapter 5: Probability**

Students will determine relative frequencies, proportions, or probabilities using simulation or calculator.

### **Chapter 6: Random Variables and Probability Distribution**

Students will determine parameters for probability distributions and describe probability distributions.

### **Chapter 7: Sampling Distributions**

Students will describe probability distributions and determine parameters, relative frequencies, proportions, or probabilities. They will also interpret statistical calculations and findings to assign meaning or assess a claim.

## Quarter 3 (January 5 – March 9)

### **Chapter 8: Estimating Proportions with Confidence**



## AP Statistics Year at a Glance

Students will identify an appropriate inference method for confidence intervals, construct a confidence interval, make an appropriate claim or draw and appropriate conclusion

### **Chapter 9: Testing Claims About Proportions**

Students will identify and verify an appropriate inference method for significance test. They will identify null and alternative hypotheses, calculate a test statistic and find a p-value and use that information to interpret and justify a claim.

### **Chapter 10: Estimating Means with Confidence**

Identify and verify an appropriate inference method for confidence intervals as well as construct and interpret an appropriate confidence interval.

### **Chapter 11: Testing Claims About Means**

Students will identify and verify an appropriate inference method for significance test. They will identify null and alternative hypotheses, calculate a test statistic and find a p-value and use that information to interpret and justify a claim.

## Quarter 4 (March 20 – May 25)

### **Chapter 12: Inference for Distributions and Relationships**

Students will identify and verify an appropriate inference method for significance test. They will identify null and alternative hypotheses, calculate a test statistic and find a p-value and use that information to interpret and justify a claim.

### **Exam Review:**

Students will review course material in preparation for the upcoming AP Exam.

**AP Statistics Exam: May 4<sup>th</sup>**