

# AP Statistics Syllabus

## FIRST MARKING PERIOD

### Chapter 1: Exploring One-Variable Data

- 1.1 Analyzing Categorical Data
- 1.2 Displaying Quantitative Data with Graphs
- 1.3 Describing Quantitative Data with Numbers

### Chapter 2: Modeling Distributions of Quantitative Data

- 2.1 Describing Location in a Distribution
- 2.2 Density Curves and Normal Distribution

### Chapter 3: Exploring Two-Variable Data

- 3.1 Scatterplots and Correlation
- 3.2 Least-Squares Regression
- 3.3 Transforming to Achieve Linearity

## SECOND MARKING PERIOD

### Chapter 4: Collecting Data

- 4.1 Sampling and Surveys
- 4.2 Experiments
- 4.3 Using Studies Wisely

### Chapter 5: Probability

- 5.1 Randomness, Probability, and Simulation
- 5.2 Probability Rules
- 5.3 Conditional Probability and Independence

### Chapter 6: Random Variables and Probability Distributions

- 6.1 Discrete and Continuous Random Variables
- 6.2 Transforming and Combining Random Variables
- 6.3 Binomial and Geometric Random Variables

### Chapter 7: Sampling Distributions

- 7.1 What is a Sampling Distribution?
- 7.2 Sample Proportions
- 7.3 Sample Means

## THIRD MARKING PERIOD

### Chapter 8: Estimating Proportions with Confidence

- 8.1 Confidence Intervals: The Basics
- 8.2 Estimating a Population Proportion
- 8.3 Estimating a Difference in Proportions

Chapter 9: Testing Claims About Proportions

- 9.1 Significance Tests: The Basics
- 9.2 Tests About a Population Proportion
- 9.3 Tests About a Difference in Proportions

Chapter 10: Estimating Means with Confidence

- 10.1 Estimating a Population Mean
- 10.2 Estimating a Difference in Means

Chapter 11: Testing Claims About Means

- 11.1 Tests About a Population Mean
- 11.2 Tests About a Difference in Means

**FOURTH MARKING PERIOD**

Chapter 12: Inference for Distributions and Relationships

- 12.1 Chi-Square Tests for Goodness of Fit
- 12.2 Inference for Two-Way Tables
- 12.3 Inference for Slope

Review for AP Exam

Project(s) [As time allows]

**Resources**

*The Practice of Statistics, Sixth edition – By Starnes & Tabor*

*AP Central material*

*Sapling Textbook Online Resources*

**Assessment Information**

<b><u>Marking Period 1</u></b>	<b><u>Marking Period 2</u></b>	<b><u>Marking Period 3</u></b>	<b><u>Marking Period 4</u></b>
Major (MAJ): Summative 55%	Major (MAJ): Summative 55%	Major (MAJ): Summative 55%	Major (MAJ): Summative 55%
Minor (MIN): Formative 25%	Minor (MIN): Formative 25%	Minor (MIN): Formative 25%	Minor (MIN): Formative 25%
Class Participation (CP): 5%	Class Participation (CP): 5%	Class Participation (CP): 5%	Class Participation (CP): 5%
Homework (HW): 15%	Homework (HW): 15%	Homework (HW): 15%	Homework (HW): 15%