

Cocalico School District
Year-at-a-Glance - Curriculum Overview

Department: Math

Course: AP Statistics

Grade Level: 11-12

Big Ideas

- Identify key and relevant information to answer a question or solve a problem.
- Describe data presented numerically or graphically.
- Calculate summary statistics, relative positions of points within a distribution, correlation, and predicted response.
- Determine relative frequencies, proportions, or probabilities using simulation or calculations.
- Identify an appropriate inference method for confidence intervals.
- Construct a confidence interval, provided conditions for inference are met.
- Identify an appropriate inference method for significance tests.
- Calculate a test statistic and find a p-value, provided conditions for inference are met.

Units of Study	% of Course Time	Textbooks & Supplemental Materials	Assessments	Standards Addressed
• Exploring Data	5%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Modeling Distribution of Data	5%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Describing Relationships	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Designing Studies	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Probability	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Random Variables	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Sampling Distributions	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• One-Sample Confidence Intervals	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• One-Sample Tests of Significance	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Comparing Two Populations	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Inference for Categorical Data	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards
• Inference for Linear Regression	9%	• <i>The Practice of Statistics (Fifth Edition)</i>	• Unit Exam • Homework/Classwork • Teacher Observations	• Extension Beyond Standards

Extension Beyond Standards means that the course goes beyond the given state standards.



Eagle P.A.C.T. Course Connections:

Students will cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.