AP Statistics Scope and Sequence 2025-2026

Learning Objectives Distribution among Units

	VAR-1	VAR-2	VAR-3	VAR-4	VAR-5	VAR-6	VAR-7	VAR-8	UNC-1	UNC-2	UNC-3	UNC-4	DAT-1	DAT-2	DAT-3
Unit 1	X	X							X						
Unit 2	X								X				X		
Unit 3	X		X											X	
Unit 4	X			X	X					X					
Unit 5	X					X					X				
Unit 6	X					X						X			X
Unit 7	X						X					X			X
Unit 8	X							X							X
Unit 9	X						X					X			X
Unit 10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

AP Statistics
Scope and Sequence 2025-2026

Grading Period 1

Unit 1: Exploring One-Variable Data
Estimated Date Range: Aug. 12 – Sept. 4 (17 total school days)
Instructional & Re-engagement Days in Unit: 17 days

Assessments

STATE/NATIONAL ASSESSMENT(S)	DISTRICT ASSESSMENT(S)	COMMON FORMATIVE ASSESSMENTS (CFAs) *(administered within designated concept)*
N/A	N/A	N/A

Concepts within the Unit	Learning Objectives
Concept #1: Intro to Statistics and Categorical Data (Topics 1.1, 1.2, 1.3, and 1.4) Suggested Days: 3	VAR-1.A Identify questions to be answered based on variation in one-variable data. VAR-1.B Identify variables in a set VAR-1.C Classify types of variables UNC-1.A Represent categorical data using frequency or relative frequency tables. UNC-1.B Describe categorical data represented in frequency or relative frequency tables. UNC-1.C Represent categorical data graphically
Concept #2: Representing and Describing Quantitative Data (Topics 1.5, 1.6, 1.7, 1.8) Suggested Days: 5	UNC-1.F Classify types of quantitative variables. UNC-1.G Represent quantitative data graphically. UNC-1.H Describe the characteristics of quantitative data distributions. UNC-1.I Calculate measures of center and position for quantitative data. UNC-1.J Calculate measures of variability for quantitative data. UNC-1.K Explain the selection of a particular measure of center and/or variability for describing a set of quantitative data. UNC-1.L Represent summary statistics for quantitative data graphically. UNC-1.M Describe summary statistics of quantitative data represented graphically.
Concept #3: Comparing Distributions of Quantitative Data (Topic 1.9) Suggested Days: 2	UNC-1.N Compare graphical representations for multiple sets of quantitative data. UNC-1.O Compare summary statistics for multiple sets of quantitative data.

Concept #4: The Normal Distribution (Topic 1.10) Suggested Days: 4	VAR-2.A Compare a data distribution to the normal distribution model. VAR-2.B Determine proportions and percentiles from a normal distribution. VAR-2.C Compare measures of relative position in data sets.

Unit 2: Exploring Two-Variable Data

Estimated Date Range: Sept. 5 – Sept. 23 (13 total school days)
Instructional & Re-engagement Days in Unit: 13 days

Assessments

STATE/NATIONAL ASSESSMENT(S)	DISTRICT ASSESSMENT(S)	COMMON FORMATIVE ASSESSMENTS (CFAs) *(administered within designated concept)*
N/A	N/A	N/A

Concepts within the Unit	Learning Objectives
Concept #1: Representing and Analyzing Two Categorical Variables (Topics 2.1, 2.2, 2.3) Suggested Days: 4	VAR-1.D Identify questions to be answered about possible relationships in data UNC-1.P Compare numerical and graphical representations for two categorical variables. UNC-1.Q Calculate statistics for two categorical variables UNC-1.R Compare statistics for two categorical variables.
Concept #2: Representing and Analyzing Two Quantitative Variables (Topics 2.4, 2.5, 2.6, 2.7, 2.8, 2.9) Suggested Days: 7	UNC-1.S Represent bivariate quantitative data using scatterplots. DAT-1.A Describe the characteristics of a scatter plot DAT-1.B Determine the correlation for a linear relationship. DAT-1.C Interpret the correlation for a linear relationship. DAT-1.D Calculate a predicted response value using a linear regression model. DAT-1.E Represent differences between measured and predicted responses using residual plots DAT-1.F Describe the form of association of bivariate data using residual plots DAT-1.G Estimate parameters for the least-squares regression line model. DAT-1.H Interpret coefficients for the least-squares regression line model. DAT-1.I Identify influential points in regression.

Unit 3: Collecting Data

Estimated Date Range: Sept. 24 – Oct. 10 (12 total school days)
Instructional & Re-engagement Days in Unit: 11 days

Assessments		
STATE/NATIONAL ASSESSMENT(S) PSAT (10/2) 1 day	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A

Concepts within the Unit	Learning Objectives
Concept #1: Sampling (Topics 3.1, 3.2, 3.3 and 3.4) Suggested Days: 4	VAR-1.E Identify questions to be answered about data collection methods. DAT-2.A Identify the type of a study. DAT-2.B Identify appropriate generalizations and determinations based on observational studies. DAT-2.C Identify a sampling method, given a description of a study. DAT-2.D Explain why a particular sampling method is or is not appropriate for a given situation. DAT-2.E Identify potential sources of bias in sampling methods.
Concept #2: Experimental Design (Topics 3.5, 3.6 and 3.7) Suggested Days: 5	VAR-3.A Identify the components of an experiment. VAR-3.B Describe elements of a well-designed experiment. VAR-3.C Compare experimental designs and methods. VAR-3.D Explain why a particular experimental design is appropriate. VAR-3.E Interpret the results of a well-designed experiment.

Grading Period 2

Unit 4: Probability, Random Variables, and Probability Distribution

Estimated Date Range: Oct. 21 – Nov. 14 (19 total school days)

Instructional & Re-engagement Days in Unit: 19 days

Assessments		
STATE/NATIONAL ASSESSMENT(S) N/A	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A

Concepts within the Unit	Learning Objectives
Concept #1: Randomness and Simulation (Topics 4.1 and 4.2)	VAR-1.F Identify questions suggested by patterns in data. UNC-2.A Estimate probabilities using simulation.

Suggested Days: 3	
Concept #2: Probability (Topics 4.3, 4.4, 4.5, and 4.6) Suggested Days: 5	VAR-4.A Calculate probabilities for events and their complements. VAR-4.B Interpret probabilities for events. VAR-4.C Explain why two events are (or are not) mutually exclusive. VAR-4.D Calculate conditional probabilities VAR-4.E Calculate probabilities for independent events and for the union of two events.
Concept #3: Random Variables (Topics 4.7, 4.8, and 4.9) Suggested Days: 4	VAR-5.A Represent the probability distribution for a discrete random variable. VAR-5.B Interpret a probability distribution. VAR-5.C Calculate parameters for a discrete random variable. VAR-5.D Interpret parameters for a discrete random variable. VAR-5.E Calculate parameters for linear combinations of random variables. VAR-5.F Describe the effects of linear transformations of parameters of random variables.
Concept #4: Probability Distributions (Topics 4.10, 4.11, and 4.12) Suggested Days: 4	UNC-3.A Estimate probabilities of binomial random variables using data from a simulation. UNC-3.B Calculate probabilities for a binomial distribution. UNC-3.C Calculate parameters for a binomial distribution. UNC-3.D Interpret probabilities and parameters for a binomial distribution UNC-3.E Calculate probabilities for geometric random variables. UNC-3.F Calculate parameters of a geometric distribution. UNC-3.G Interpret probabilities and parameters for a geometric distribution.

Unit 5: Sampling Distributions

Estimated Date Range: Nov. 17 – Dec. 20 (20 total school days)

Estimated Time Frame: 16 days

Assessments

STATE/NATIONAL ASSESSMENT(S)	DISTRICT ASSESSMENT(S)	COMMON FORMATIVE ASSESSMENTS (CFAs) *(administered within designated concept)*	Semester Exams
N/A	N/A	N/A	(4 days) Testing Window (12/16 – 12/19)

Concepts within the Unit	Learning Objectives
Concept #1: The Normal Distribution and the Central Limit Theorem (Topics 5.1, 5.2, and 5.3)	VAR-1.G Identify questions suggested by variation in statistics for samples collected from the same population. VAR-6.A Calculate the probability that a particular value lies in a given interval of a normal distribution. VAR-6.B Determine the interval associated with a given area in a normal distribution.

Suggested Days: 3	UNC-3.H Estimate sampling distributions using simulation.
Concept #2: Sampling Distributions for Proportions (Topics 5.4, 5.5 and 5.6) Suggested Days: 4	UNC-3.I Explain why an estimator is or is not unbiased. UNC-3.J Calculate estimates for a population parameter. UNC-3.K Determine parameters of a sampling distribution for sample proportions. UNC-3.L Determine whether a sampling distribution for a sample proportion can be described as approximately normal. UNC-3.M Interpret probabilities and parameters for a sampling distribution for a sample proportion. UNC-3.N Determine parameters of a sampling distribution for a difference in sample proportions. UNC-3.O Determine whether a sampling distribution for a difference of sample proportions can be described as approximately normal. UNC-3.P Interpret probabilities and parameters for a sampling distribution for a difference in proportions
Concept #3: Sampling Distributions for Means (Topics 5.7 and 5.8) Suggested Days: 4	UNC-3.Q Determine parameters for a sampling distribution for sample means UNC-3.R Determine whether a sampling distribution of a sample mean can be described as approximately normal. UNC-3.S Interpret probabilities and parameters for a sampling distribution for a sample mean. UNC-3.T Determine parameters of a sampling distribution for a difference in sample means.

Grading Period 3

Unit 6: Inference for Categorical Data: Proportions

Estimated Date Range: Jan. 8 – Feb. 6 (21 total school days)

Instructional & Re-engagement Days in Unit: 21 days

Assessments

STATE/NATIONAL ASSESSMENT(S)	DISTRICT ASSESSMENT(S)	COMMON FORMATIVE ASSESSMENTS (CFAs) *(administered within designated concept)*
N/A	N/A	N/A

Concepts within the Unit	Learning Objectives
Concept #1: Confidence Intervals for Proportions (Topics 6.1, 6.2, and 6.3) Suggested Days: 4	VAR-1.H Identify questions suggested by variation in the shapes of distributions of samples taken from the same population. UNC-4.A Identify an appropriate confidence interval procedure for a population proportion. UNC-4.B Verify the conditions for calculating confidence intervals for a population proportion.

	UNC-4.C Determine the margin of error for a given sample size and an estimate for the sample size that will result in a given margin of error for a population proportion. UNC-4.D Calculate an appropriate confidence interval for a UNC-4.E Calculate an interval estimate based on a confidence interval for a population proportion. UNC-4.F Interpret a confidence interval for a population proportion. UNC-4.G Justify a claim based on a confidence interval for a population proportion. UNC-4.H Identify the relationships between sample size, width of a confidence interval, confidence level, and margin of error for a population proportion.
Concept #2: Testing Hypotheses about Proportions (Topics 6,4, 6.5, and 6.6) Suggested Days: 5	VAR-6.D Identify the null and alternative hypotheses for a population proportion. VAR-6.E Identify an appropriate testing method for a population proportion. VAR-6.F Verify the conditions for making statistical inferences when testing a population proportion. VAR-6.G Calculate an appropriate test statistic and p-value for a population proportion. DAT-3.A Interpret the p-value of a significance test for a population proportion. DAT-3.B Justify a claim about the population based on the results of a significance test for a population proportion.
Concept #3: Type I and Type II Errors (Topic 6.7) Suggested Days: 3	UNC-5.A Identify Type I and Type II errors. UNC-5.B Calculate the probability of a Type I and Type II errors. UNC-5.C Identify factors that affect the probability of errors in significance testing. UNC-5.D Interpret Type I and Type II errors.
Concept #4: Confidence Intervals for the Difference of Two Proportions (Topics 6.8 and 6.9) Suggested days: 3	UNC-4.I Identify an appropriate confidence interval procedure for a comparison of population proportions. UNC-4.J Verify the conditions for calculating confidence intervals for a difference between population proportions. UNC-4.K Calculate an appropriate confidence interval for a comparison of population proportions. UNC-4.L Calculate an interval estimate based on a confidence interval for a difference of proportions UNC-4.M Interpret a confidence interval for a difference of proportions. UNC-4.N Justify a claim based on a confidence interval for a difference of proportions.
Concept #5: Test for Difference of Two Population Proportions (Topics 6.10 and 6.11) Suggested days: 3	VAR-6.H Identify the null and alternative hypotheses for a difference of two population proportions. VAR-6.I Identify an appropriate testing method for the difference of two population proportions. VAR-6.J Verify the conditions for making statistical inferences when testing a difference of two population proportions. VAR-6.K Calculate an appropriate test statistic for the difference of two population proportions. DAT-3.C Interpret the p-value of a significance test for a difference of population proportions. DAT-3.D Justify a claim about the population based on the results of a significance test for a difference of population proportions.

Unit 7: Inference for Quantitative Data: Means Estimated Date Range: Feb. 9 – Mar. 9 (18 total school days) Instructional & Re-engagement Days in Unit: 17 days		
Assessments		
STATE/NATIONAL ASSESSMENT(S) K-12 TELPAS WINDOW (2/17 – 3/27) SAT (3/4) 1 day	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A

Concepts within the Unit	**Learning Objectives**
Concept #1: Confidence Intervals for Means (Topics 7.1, 7.2, and 7.3) Suggested Days: 4	VAR-1.I Identify questions suggested by probabilities of errors in statistical inference VAR-7.A Describe t-distributions. UNC-4.O Identify an appropriate confidence interval procedure for a population mean, including the mean difference between values in matched pairs. UNC-4.P Verify the conditions for calculating confidence intervals for a population mean, including the mean difference between values in matched pairs. UNC-4.Q Determine the margin of error for a given sample size for a one-sample t-interval. UNC-4.R Calculate an appropriate confidence interval for a population mean, including the mean difference between values in matched pairs. UNC-4.S Interpret a confidence interval for a population mean, including the mean difference between values in matched pairs UNC-4.T Justify a claim based on a confidence interval for a population mean, including the mean difference between values in matched pairs. UNC-4.U Identify the relationships between sample size, width of a confidence interval, confidence level, and margin of error for a population mean.
Concept #2: Tests for Populations Means (Topics 7.4 and 7.5) Suggested Days: 4	VAR-7.B Identify an appropriate testing method for a population mean with unknown, σ , including the mean difference between values in matched pairs. VAR-7.C Identify the null and alternative hypotheses for a population mean with unknown, σ , including the mean difference between values in matched pairs. VAR-7.D Verify the conditions for the test for a population mean, including the mean difference between values in matched pairs. VAR-7.E Calculate an appropriate test statistic for a population mean, including the mean difference between values in matched pairs. DAT-3.E Interpret the p-value of a significance test for a population mean, including the mean difference between values in matched pairs.

	DAT-3.F Justify a claim about the population based on the results of a significance test for a population mean.
Concept #3: Confidence Intervals for the Difference of Two Means (Topics 7.6 and 7.7) Suggested Days: 3	UNC-4.V Identify an appropriate confidence interval procedure for a difference of two population means. UNC-4.W Verify the conditions to calculate confidence intervals for the difference of two population means. UNC-4.X Determine the margin of error for the difference of two population means. UNC-4.Y Calculate an appropriate confidence interval for a difference of two population means. UNC-4.Z Interpret a confidence interval for a difference of population means. UNC-4.AA Justify a claim based on a confidence interval for a difference of population means UNC-4.AB Identify the effects of sample size on the width of a confidence interval for the difference of two means.
Concept #4: Tests for the Difference of Two Population Means (Topics 7.8, 7.9, and 7.10) Suggested Days: 3	VAR-7.F Identify an appropriate selection of a testing method for a difference of two population means. VAR-7.G Identify the null and alternative hypotheses for a difference of two population means. VAR-7.H Verify the conditions for the significance test for the difference of two population means. VAR-7.I Calculate an appropriate test statistic for a difference of two means. DAT-3.G Interpret the p-value of a significance test for a difference of population means. DAT-3.H Justify a claim about the population based on the results of a significance test for a difference of two population means in context.
Unit 8: Inference for Categorical Data: Chi Square (Continues in Grading Period 4) Estimated Date Range: Mar. 10 – Apr. 6 (14 total school days) Instructional & Re-engagement Days in Unit: 14 days (4 days in GP3 and 10 days in GP4)	
Grading Period 4	
Unit 8: Inference for Categorical Data: Chi Square (Continued) Estimated Date Range: Mar. 10 – Apr. 6 (14 total school days) Instructional & Re-engagement Days in Unit: 14 days (4 days in GP3 and 10 days in GP4)	
Assessments	

STATE/NATIONAL ASSESSMENT(S) K-12 TELPAS WINDOW (2/17 – 3/27)	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A

Concepts within the Unit	**Learning Objectives**
Concept #1: Chi Square Goodness of Fit Tests (Topics 8.1, 8.2, and 8.3) Suggested Days: 5	VAR-1.J Identify questions suggested by variation between observed and expected counts in categorical data. VAR-8.A Describe chi-square distributions. VAR-8.B Identify the null and alternative hypotheses in a test for a distribution of proportions in a set of categorical data VAR-8.C Identify an appropriate testing method for a distribution of proportions in a set of categorical data. VAR-8.D Calculate expected counts for the chi-square test for goodness of fit. VAR-8.E Verify the conditions for making statistical inferences when testing goodness of fit for a chi-square distribution. VAR-8.F Calculate the appropriate statistic for the chi-square test for goodness of fit. VAR-8.G Determine the p-value for chi-square test for goodness of fit significance test. DAT-3.I Interpret the p-value for the chi-square test for goodness of fit. DAT-3.J Justify a claim about the population based on the results of a chi-square test for goodness of fit.
Concept #2: Chi Square Test for Homogeneity or Independence (Topics 8.4, 8.5, 8.6, and 8.7) Suggested Days: 6	VAR-8.H Calculate expected counts for two-way tables of categorical data. VAR-8.I Identify the null and alternative hypotheses for a chi-square test for homogeneity or independence. VAR-8.J Identify an appropriate testing method for comparing distributions in two-way tables of categorical data. VAR-8.K Verify the conditions for making statistical inferences when testing a chi-square distribution for independence or homogeneity. VAR-8.L Calculate the appropriate statistic for a chi-square test for homogeneity or independence VAR-8.M Determine the p-value for a chi-square significance test for independence or homogeneity. DAT-3.K Interpret the p-value for the chi-square test for homogeneity or independence. DAT-3.L Justify a claim about the population based on the results of a chi-square test for homogeneity or independence.

Unit 9: Inference for Quantitative Data: Slopes

Estimated Date Range: April 7 – April 23 (13 total school days)

Instructional & Re-engagement Days in Unit: 13 days

Assessments		
STATE/NATIONAL ASSESSMENT(S) N/A	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A

Concepts within the Unit	Learning Objectives
Concept #1: Confidence Intervals for the Slope of a Regression Model (Topics 9.1, 9.2 and 9.3) Suggested days: 7	VAR-1.K Identify questions suggested by variation in scatter plots. UNC-4.AC Identify an appropriate confidence interval procedure for a slope of a regression model. UNC-4.AD Verify the conditions to calculate confidence intervals for the slope of a regression model. UNC-4.AE Determine the given margin of error for the slope of a regression model. UNC-4.AF Calculate an appropriate confidence interval for the slope of a regression model. UNC-4.AG Interpret a confidence interval for the slope of a regression model. UNC-4.AH Justify a claim based on a confidence interval for the slope of a regression model. UNC-4.AI Identify the effects of sample size on the width of a confidence interval for the slope of a regression model.
Concept #2: Test for the Slope of a Regression Model (Topics 9.4, 9.5, and 9.6) Suggested Days: 3	VAR-7.J Identify the appropriate selection of a testing method for a slope of a regression model. VAR-7.K Identify appropriate null and alternative hypotheses for a slope of a regression model VAR-7.L Verify the conditions for the significance test for the slope of a regression model. VAR-7.M Calculate an appropriate test statistic for the slope of a regression model DAT-3.M Interpret the p-value of a significance test for the slope of a regression model. DAT-3.N Justify a claim about the population based on the results of a significance test for the slope of a regression model.

Unit 10: AP Review and Statistics Activities
Estimated Date Range: April 24 – May 28 (24 total school days)
Instructional & Re-engagement Days in Unit: 19 days

Assessments			
STATE/NATIONAL ASSESSMENT(S) AP Exams (5/4 – 5/15) 1 day	**DISTRICT ASSESSMENT(S)** N/A	**COMMON FORMATIVE ASSESSMENTS (CFAs)** *(administered within designated concept)* N/A	**Semester Exams** (4 days) Testing Window (5/22 – 5/28)

Concepts within the Unit	Learning Objectives
Concept #1: Exploring Data	VAR-1 A – D VAR-1 A – C

Suggested Days: Determined on individual student need	UNC-1 A – C, F – S DAT-1 A – I
Concept #2: Sampling and Experimentation Suggested Days: Determined on individual student need	VAR -1 E VAR-3 A – E DAT-2 A – E
Concept #3: Probability and Distribution Models Suggested Days: Determined on individual student need	VAR-1 F, G VAR-4 A – E VAR-5 A – F VAR-6 A, B UNC-2 A UNC-3 A – T
Concept #4: Statistical Inference Suggested Days: Determined on individual student need	VAR-1 H – K VAR-6 D – K VAR-7 A – M VAR-8 A – M UNC-4 A – Z, AA – AI UNC-5 A – D DAT-3 C – N