

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 time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course are best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

Publisher Resource:

[Statistics Through Applications](#)

Other Course Supplemental Resources:

Khan Academy Core - [Statistics and Probability](#)

- [AP Statistics](#)

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 10 – Oct 13	1 8/10 - 8/11	Chapter 1 – Statistics: the Art and Science of Data <ul style="list-style-type: none"> Section 1.1 – <u>Where Do Data Come From</u> 	Section 1.1 – Perdisco.tv - Introduction to statistics
	2 8/14 – 8/18	<ul style="list-style-type: none"> Section 1.2 – <u>Drawing Conclusions From Data</u> Chapter 2 – Describing Distributions of Data <ul style="list-style-type: none"> Section 2.1 – <u>Displaying Distributions with Graphs</u> 	Section 1.2 – Perdisco.tv - Introduction to statistics Section 2.1– Perdisco.tv - Presenting data Khan Academy – Bar Graphs Line Graphs Pie Graphs Stem-And-Leaf Plots (stemplots)
	3 8/21 – 8/25	<ul style="list-style-type: none"> Section 2.1 – <u>Displaying Distributions with Graphs</u> Assessment Section 2.2 – <u>Describing Distributions with Numbers</u> 	Section 2.2 – Khan Academy - Displaying and describing data Khan Academy – Box and Whisker Plots (boxplots) Reading Box and Whisker Plots Mean, Median, and Mode Range and Midrange Statistics: The Average Statistics: Sample Mean vs Population Mean Statistics: Standard Deviation
	4 8/28 – 9/1	<ul style="list-style-type: none"> Section 2.2 – <u>Describing Distributions with Numbers</u> Section 2.3 – <u>Use and Misuse of Statistics</u> Review Assessment 	Section 2.3 – YouTube - Misuse of Statistics Khan Academy – Reading Pictographs Misleading Line Graphs
	5 9/5 – 9/8	Chapter 3 – Modeling Distributions of Data <ul style="list-style-type: none"> 3.1 – <u>Measuring location in a Distribution</u> 	Section 3.1 – Khan Academy - Normal distribution
	6 9/11 – 9/15	<ul style="list-style-type: none"> 3.1 – <u>Measuring location in a Distribution</u> 3.2 – <u>Normal Distributions</u> 	Section 3.2 – Khan Academy - Normal distribution Khan Academy – Introduction to the Normal Distribution Normal Distribution Excel Exercise Normal Distribution Problems: Qualitative sense of normal distributions Normal Distribution Problems: Empirical Rule Exercise: Standard Normal Distribution and the Empirical Rule More Empirical Rule and Z-score practice

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

Probability & Statistics with Applications Honors

2017 – 2018

7 9/18 – 9/22	<ul style="list-style-type: none"> • 3.2 – Normal Distributions • Assessments 	
8 9/25 – 9/29	Chapter 4 – Describing Relationships <ul style="list-style-type: none"> • 4.1 Scatterplots and Correlation 	Section 4.1 – Khan Academy - Describing relationships in quantitative data Khan Academy – Correlation and Causality
9 10/2 – 10/6	<ul style="list-style-type: none"> • Assessment • 4.2 Regression and Prediction 	Section 4.2 – Khan Academy - Describing relationships in quantitative data Khan Academy – Regression Line Example Second Regression Example Calculating R-Squared R-Squared or Coefficient of Determination
10 10/9 – 10/13	<ul style="list-style-type: none"> • 4.2 Regression and Prediction • Review • Assessment 	

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 17 – Dec 21	1 10/17 – 10/20	Chapter 5 – Sampling and Surveys <ul style="list-style-type: none"> Section 5.1 – <u>Samples, Good and Bad</u> 	Khan Academy – Margin of Error 1 Margin of Error 2 Section 5.1 – Khan Academy - Samples and surveys
	2 10/23 – 10/27	<ul style="list-style-type: none"> Section 5.2 – <u>What Do Samples Tell Us?</u> Section 5.3 – <u>Sample Surveys in the Real World</u> 	Section 5.2 – Khan Academy - Samples and surveys Section 5.3 – Khan Academy - Samples and surveys
	3 10/30 – 11/3	<ul style="list-style-type: none"> Section 5.3 – <u>Sample Surveys in the Real World</u> Review Assessment 	
	4 11/6 – 11/9	Chapter 6 – Designing Experiments <ul style="list-style-type: none"> Section 6.1 – <u>Experiments, Good and Bad</u> 	Section 6.1 – YouTube - Introduction to Experimental Design
	5 11/13 – 11/17	<ul style="list-style-type: none"> Section 6.2 – <u>Experiments in the Real World</u> Section 6.3 – <u>Data Ethics</u> 	Section 6.2 – YouTube - Introduction to Experimental Design Section 6.3 – YouTube - Experiments and Ethics
	6 11/20 – 11/21	<ul style="list-style-type: none"> Review Assessment 	
	7 11/27 – 12/1	<ul style="list-style-type: none"> Semester Review 	
	8 12/4 – 12/8	<ul style="list-style-type: none"> Semester Review 	
	9 12/11 – 12/15	<ul style="list-style-type: none"> District Exams 	
	10 12/18 – 12/21	<ul style="list-style-type: none"> District Exams 	

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

	Week	Major Concepts / Topics	Possible Resources
Quarter 3 Jan 8 – Mar 15	1 1/8 – 1/12	Chapter 7 – Probability: What are the Chances? <ul style="list-style-type: none"> Section 7.1 – <u>Randomness, Probability, and Simulations</u> 	Section 7.1 – Khan Academy - Intro to theoretical probability
	2 1/16 – 1/19	Chapter 7 – Probability: What are the Chances? <ul style="list-style-type: none"> Section 7.1 – <u>Randomness, Probability, and Simulations</u> Section 7.2 – <u>Probability Rules</u> 	Section 7.2 – Khan Academy - Multiplication rule for independent events
	3 1/22 – 1/26	<ul style="list-style-type: none"> Assessment Section 7.3 – <u>Conditional Probability and Independence</u> 	Section 7.3 – Khan Academy - Multiplication rule for dependent events
	4 1/30 – 2/2	<ul style="list-style-type: none"> Section 7.3 – <u>Conditional Probability and Independence</u> Review Assessment 	
	5 2/5 – 2/9	Chapter 8 – Probability Models <ul style="list-style-type: none"> Section 8.1 - <u>Probability Distributions</u> 	Section 8.1 – Khan Academy - Random variables
	6 2/12 – 2/16	<ul style="list-style-type: none"> Section 8.2 – <u>Counting and Probability</u> 	Section 8.2 - Khan Academy - Probability with counting outcomes
	7 2/20 – 2/23	<ul style="list-style-type: none"> Section 8.3 – <u>Binomial Distributions</u> Review Assessment 	Section 8.3 – Khan Academy - Binomial random variables
	8 2/26 – 3/2	Chapter 9/10 (Confidence Intervals) <ul style="list-style-type: none"> Section 9.1 – <u>What is a Confidence Interval?</u> 	Section 9.1 – Khan Academy - Confidence interval
	9 3/5 – 3/9	<ul style="list-style-type: none"> Section 9.1 – <u>What is a Confidence Interval?</u> Section 10.2 – <u>Inference about a Population Mean</u> 	Section 10.2 – Khan Academy - Significance tests (one sample)
	10 3/12 – 3/15	<ul style="list-style-type: none"> Section 10.2 – <u>Inference about a Population Mean</u> Review Assessment 	

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

	Week	Major Concepts / Topics	Possible Resources
Quarter 4 Mar 19 – May 24	1 3/19 – 3/23	Chapter 9/10 (Significance Test) <ul style="list-style-type: none"> Section 9.2 – <u>What is a Significance Test?</u> 	Section 9.2 – Khan Academy - Significance tests (one sample)
	2 3/26 – 3/30	<ul style="list-style-type: none"> SPRING BREAK – NO SCHOOL 	
	3 4/2 – 4/6	<ul style="list-style-type: none"> Section 9.2 – <u>What is a significance Test?</u> Section 10.2 – <u>Inference about a Population Mean</u> 	Section 10.2 – Khan Academy - Significance tests (one sample)
	4 4/9 – 4/13	<ul style="list-style-type: none"> Section 10.2 – <u>Inference about a Population Mean</u> Section 9.3 – <u>Use and Abuse of Statistical Inference</u> 	Section 9.3 – JB Statistics - Statistical Significance vs Practical Significance
	5 4/16 – 4/20	<ul style="list-style-type: none"> Section 9.3 – <u>Use and Abuse of Statistical Inference</u> Review Assessment 	
	6 4/23 – 4/27	Chapter 10 Inference in Practice <ul style="list-style-type: none"> Section 10.1 – <u>Chi-Square Test: Goodness of Fit and Two-Way Tables</u> 	Section 10.1 – Khan Academy - Inference for categorical data (chi-square tests)
	7 4/30 – 5/4	<ul style="list-style-type: none"> Section 10.1 – <u>Chi-Square Test: Goodness of Fit and Two-Way Tables</u> Review Assessments 	
	8 5/7 – 5/11	<ul style="list-style-type: none"> Course Standards Review 	
	9 5/14 – 5/18	<ul style="list-style-type: none"> Course Standards Review 	
	10 5/21 – 5/24	<ul style="list-style-type: none"> Final Exams 	

All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.