



Weekly Lesson Plans



Course: Statistical Modeling

Period(s): 1st 3rd

Teacher(s): Stone

If you have questions, please feel free to email me: @greenville.k12.sc.us or leave me a message at 355-6600

Why is this course important?

Link to Course Syllabus

[Syllabus](#)

Link to Course Standards

[Standards](#)

Quarter 1		Quarter 2	
Week 1 Aug 11 - 15	Week 6 Sept 15 - 19	Week 10 Oct 13 - 17	Week 15 Nov 17 - 21
Week 2 Aug 18 - 22	Week 7 Sept 22 - 26	Week 11 Oct 20 - 24	Week 16 Nov 24 - 28
Week 3 Aug 25 - 29	Week 8 Sept 29 - Oct 3	Week 12 Oct 27 - Oct 31	Week 17 Dec 1 - 5
Week 4 Sept 1 - 5	Week 9 Oct 6 -10	Week 13 Nov 3 - 7	Week 18 Dec 8 - 12
Week 5 Sept 8 - 12		Week 14 Nov 10 - 14	Dec 15 - 19

Week: Aug 11 - 15

Unit(s): Nature of Statistics

Agenda

Work
to Submit

Learning
Target

Standards
for the Week

Monday	Tuesday	Wednesday	Thursday	Friday
Intros, syllabus, and activity	Warm-Up 1.1 Classification of Variables and Data 1.2 Measurement scales	Warm-Up 1.3 The basic sampling techniques	Warm-up 1.4 Observational and experimental studies Uses and misuses of statistics	Chapter 1 Quiz review Quiz
None	Individual practice on 1.1 And 1.2	Individual practice 1.3	Quiz review	Quiz review and quiz
Students will understand the syllabus for Statistical Modeling CP	Students will be able to classify given variables, data, and measurements	Students will be able to identify techniques given different methods of sampling	Students will be able to determine differences and apply labels when given different types of studies.	Students will be able to apply knowledge of unit 1 on a quiz.

SM.DPSR.4.1 Describe quantitative and categorical data.

Week: Aug 18 - 22

Unit(s): Frequency distributions and Graphs

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Warm-Up / Lesson 2.1:Frequency Distribution	Warm-up 2.2 histograms and Bar Graphs	Warm-Up 2.3 Distribution shapes	Warm up 2.4 Constructing Stem and Leaf Plots Constructing pie charts Chapter 2 quiz review	Chapter 2 Quiz review and quiz
Work to Submit	2.1 practice	2.2 Practice	2.3 Practice	2.4 practice	Chapter 2 quiz
Learning Target	Students will be able to create frequency distributions given sets of data	Students will be able to create histograms and bar graphs given sets of data	Students will be able to identify shapes of distributions given real world examples	Students will be able to create pie charts and stem/leaf plots given sets of data	Students will demonstrate an understanding of chapter given a quiz
Standards for the Week					

Week: Aug 25 - 29

Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Chapter 1-2 test review	Chapter 1-2 test review Chapter 1-2 Test	3.1 Summarize data with medians: Boxplots	3.2 Summarize data with means and modes	Chapter 3 part 1 quiz review and quiz
Work to Submit	Chapter 1-2 Test review	Chapter 1-2 test	3.1 practice	3.2 practice	Chapter 3 part 1 quiz review and quiz
Learning Target	Students will demonstrate an understanding of chapter 1-2given a test review	Students will demonstrate an understanding of chapter 1-2given a test	Students will be able to create box plots given sets of data	Students will be able to calculate mean and mode given sets of data	Students will be able to apply knowledge of boxplots, means, medians given a quiz
Standards for the Week	SM.DPSR.4.6 Use simulated sampling distributions to describe the sample-to-sample variability of sample statistics				

Week: Sept 1 - 5

Unit(s): Normal Distributions/

	Monday School Holiday	Tuesday	Wednesday	Thursday	Friday
Agenda		3.3 Standard deviation	3.4 Calculate and read z-score	3.5 empirical rule	3.3-3.5 quiz review and quiz
Work to Submit		3.3 practice classwork	3.4 practice classwork	3.5 practice classwork	3.3-3.5 quiz review
Learning Target		Students will be able to calculate standard deviation given a set of data	Students will be able to calculate z score given mean, standard deviation and value	Students will be able to apply the empirical rule and calculate percentages between, below and above z scores	Students will be able to apply their knowledge of chapter 3.3-3.5 given a quiz.
Standards for the Week	SM.DPSR.1.2 Approximate percentages using the Empirical Rule and z-scores for normally distributed data SM.DPSR.1.1 Calculate and interpret z-scores as a measure of relative standing to standardize units.				

Week: Sept 8 - 12

Unit(s): Normal Distributions/ Probability

Agenda

Monday

Tuesday

Wednesday

Thursday

Friday

3.3-3.5 Quiz
3.6- central limit theorem

Chapter 3 Test review

Chapter 3 Test

Notes on cards

4.1 classic probability

Work
to Submit

3.3-3.5 quiz
3.6 classwork

Chapter 3 Test Review

Chapter 3 Test

Cards practice

4.1 classwork

Learning
Target

Students will be able to
apply the central limit
theorem given real world
data

Students will be able to
apply the central limit
theorem given real world
data

Students will be able to
apply the central limit
theorem given real world
data

Students will be able to
demonstrate a basic
understanding of sample
space given a standard
deck of cards

Students will be able to
calculate simple
probability given real life
examples

Standards
for the Week

SM.DPSR.1.2 Approximate percentages using the Empirical Rule and z-scores for normally distributed data
SM.DPSR.1.1 Calculate and interpret z-scores as a measure of relative standing to standardize units.

Week: Sept 15 - 19	Unit(s):
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	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	4.1 classic probability	4-2: The Addition Rules for Probability	4-3: Multiplication Rules and Conditional Probability	4-3: Multiplication Rules and Conditional Probability	4.1-4.3 quiz
Work to Submit	4.1 classwork	4.2 practice	4-3 practice	4-3 practice, 4.1-4.3 quiz review	4.1-4.3 quiz
Learning Target	Students will be able to calculate simple probability given real life examples	Students will be able to determine whether events (A) and (B) are independent by comparing the calculated joint probability with the product of their individual probabilities	Students will demonstrate the use of conditional probability to assess independence of events in real-world scenarios.	Students will demonstrate the use of conditional probability to assess independence of events in real-world scenarios.	Students will demonstrate the use of conditional probability to assess independence of events in real-world scenarios.

Standards
for the Week

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Week: Sept 22 - 26

Unit(s):

Agenda

Work
to Submit

Learning
Target

Monday	Tuesday	Wednesday	Thursday	Friday
4-4 permutations, combinations part 1	4-4 permutations, combinations part 2	5-1 and 5-2 part 1	5-2 part 2 Quiz review	4-4 to 5-2 quiz
4-4 classwork	4-4 part 2 classwork	5-1 and 5-2 classwork	Quiz review	Quiz
Students will be able to define conditional probability and provide	Students will be able to define conditional probability and provide	Students will be able to interpret the results of probability calculations in	Students will be able to interpret the results of probability calculations in	Students will be able to interpret the results of probability calculations in

real-world examples (e.g., the probability of rain given that it is	real-world examples (e.g., the probability of rain given that it is	the context of a given problem or mode	the context of a given problem or mode	the context of a given problem or mode Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is
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Standards
for the Week

SM.DPSR.1.3 Using simulations taken from a given population, model sample-to-sample variability in sampling distributions of a statistic.

Week: Sept 29 - Oct 3	Unit(s):
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Monday	Tuesday	Wednesday	Thursday	Friday
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Agenda Work to Submit Learning Target	Binomial distribution	Test Review	Test	Probability project	Probability Project
	Binomial Distribution practice	Test review	Test	Probability Project	Probability Project
	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world examples (e.g., the probability of rain given that it is
Standards for the Week	SM.DPSR.1.3 Using simulations taken from a given population, model sample-to-sample variability in sampling distributions of a statistic.				

Week: Oct 6 -10	Unit(s):Probability
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Agenda Work to Submit Learning Target	Monday	Tuesday	Wednesday	Thursday	Friday End of Q1 Grading Period
	Probability project	Probability Project	Probability project	Probability Project	Probability project
	Probability project	Probability Project	Probability project	Probability Project	Probability project
	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world	- Students will be able to interpret the results of probability calculations in the context of a given problem or mode - Students will be able to define conditional probability and provide real-world

examples (e.g., the probability of rain given that it is	examples (e.g., the probability of rain given that it is	examples (e.g., the probability of rain given that it is	examples (e.g., the probability of rain given that it is	examples (e.g., the probability of rain given that it is
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Standards
for the Week

SM.DPSR.1.3 Using simulations taken from a given population, model sample-to-sample variability in sampling distributions of a statistic.

Week: Oct 13 - 17

Unit(s):Regression

Agenda
Work
to Submit

Monday	Tuesday	Wednesday	Thursday	Friday
No School	10-1 scatter plots and correlation	10-2 regression	Regression quiz review	Regression Quiz
No School	10-1 practice	10-2 practice	Regression quiz review	Regression Quiz

Learning
Target

No School	Students will be able to create a scatter plot and determine correlation given real world data	Students will be able to calculate regression given real world data	Students will be able to calculate regression given real world data	Students will be able to calculate regression given real world data
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Standards
for the Week

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Week: Oct 20 - 24

Unit(s):Regression

Agenda

Monday Q1 Report Card	Tuesday	Wednesday	Thursday	Friday
10-3 Testing significance				

Work
to Submit

Learning
Target

Students will be able to test if a correlation coefficient is significant.				
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Standards
for the Week

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Week: Oct 27 - Oct 31

Unit(s):

Agenda

Monday	Tuesday	Wednesday	Thursday	Friday

Work
to Submit

Learning
Target

Standards
for the Week

Week: Nov 3 - 7	Unit(s):
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Monday	Tuesday	Wednesday	Thursday	Friday
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Agenda					
Work to Submit					
Learning Target					
Standards for the Week					

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					
Standards for the Week					

Week: Nov 17 - 21

Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					
Standards for the Week					

Week: Nov 24 - 28	Unit(s):
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		Monday	Tuesday	Wednesday School Holiday	Thursday School Holiday	Friday School Holiday
Agenda Work to Submit Learning Target						
Standards for the Week						

Week: Dec 1 - 5

Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					
Standards for the Week					

Week: Dec 8 - 12

Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					
Standards for the Week					

Week: Dec 15 - 19

Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday End of Q2 Grading Period Half Day for Students
Agenda					
Work to Submit					
Learning Target					
Standards for the Week					