

# Shasta College

Division: Science, Language Arts, and Math



Math 114 – Pre-Statistics, August 20 – October 18  
Math 14 – Statistics, October 22 – Dec 21  
MTWTh 12:00 noon – 2:15 pm

Fall 2018  
Sections F0174, F1958  
TE 7210

**Instructor:** Professor Debra Griffin  
**E-mail:** dgriffin@shastacollege.edu

**Office Hours:** See last page  
**Phone:** (530) 529-8980

*When emailing, please include your full name, class name, and the days and times of your class in the subject heading.*

**Textbook:** *Statistics*, OpenStax e-version, bundled with WebAssign ISBN 9781337777186.

	Webservice	Bookstore cost	Online cost
Math 114 See Page 8	Introductory Statistics, OpenStax (eVersion) + WebAssign bundle	\$50 (textbook vouchers ok)	\$35 (credit card only)
Math 14 See Page 9	Introductory Statistics, OpenStax (eVersion) + WebAssign bundle	\$50 (textbook vouchers ok)	\$35 (credit card only)

**Materials:** TI84 Graphing Calculator is recommended, but not required. Any scientific calculator would be ok. Colored pencils will be needed.

**Wait List and Add Policy:** On a waiting list, you are eligible for a place in class if you come to every class and if you turn in the work while you are there. Being on a waiting list does not mean you are guaranteed a place in class. It simply means you are welcome to wait for an opening in the class if you desire. If no one drops out of the section you're attending, no students can add. As a result, you should be aware of the last day to add and have a back-up class chosen if you need another class. Please note that it is the student's responsibility to add this class, even if given permission to add by the instructor. The student must self enroll using a special code provided, or complete an add form and submit this form to the registrar. The last day to add this class is ***Friday, August 31, 2018.***

**Drop Policy:** Work schedules and course load can sometimes prove to be overwhelming. When this is the case, students can choose to drop classes without record within the first two weeks of the semester. A course that has been dropped with record will count as one of the three allowable attempts for that course. The last day to drop this class without record is ***Friday, August 31, 2018.***

**Attendance:** Attendance will be taken daily. Tardy and early departures count as ½ absence. If a student misses more than 5 class hours the student may be dropped from the class. It is important to notify me in advance or as soon as possible regarding all absences.

**Food and Drink:** Food and drink are a distraction to the learning environment and crumbs and spills can be an unwanted attraction to pests. Snacks may be consumed outside the classroom.

**Shasta College**

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**Extra Help:** Please feel free to drop in for help during my office hours in room 7310 located on the west side of the building nearest the parking lot. If the light on the office hallway door is green, then push hard to open the door (it sticks). Tehama campus has an excellent Learning Center in room 7115. I highly recommend that you take advantage of this service even if just to use the room as a quiet environment to get your homework done. Math tutoring hours are posted in the main office.

**Quizzes:** (10%) There will be approximately 12 group quizzes for math 114 and 12 group quizzes for math 14 on which students are encouraged to work collaboratively with classmates. Work must be neat, *done in pencil*, with all worksteps shown. Worksteps as well as the final answer to each problem will be graded for accuracy. Each quiz is due at the end of the designated class session. The two lowest quiz scores will be dropped.

**Homework:** (10%) Homework will be assigned via the online webservice, WebAssign. Be sure to register for WebAssign immediately and begin working on the assigned problems.

**Exams:** (60%) There will be four mid-term exams in Math 114 and four mid-term exams in Math 14. Please remember to turn cell phones off during exams. Exams must be *done in pencil*.

**Bonus Points:** Students may receive extra credit for attending Student Success workshops (3 points each) and for visiting the Learning Center (1 points each hour – up to 5 points each chapter).

**Final Exam:** (20%) The final exam is mandatory and will be cumulative and multiple choice. It will be administered in this classroom, 7210 on

Math 114: *Thursday, Oct 18, 2018 at 12:00 noon – 2:15 pm.*

Math 14: *Thursday, Dec 20, 2018 at 12:00 noon – 2:15 pm.*

**Make-Up Policy:** There will be no make-up exams or quizzes. The lowest midterm exam and two lowest quiz scores will be dropped for each course. This allows for a student to miss one exam without severe penalty.

**Evaluation:** Grades will be determined by the percentage earned of the total points.

A	90%	-	100%
B	80%	-	89%
C	70%	-	79%
D	60%	-	69%
F	0%	-	59%

**Behavior:** Students are expected to exhibit respectful behavior to other students and the instructor. A student may be suspended from the class if he or she engages in a classroom behavior that interferes with the learning environment. Such behavior includes, but is not limited to, disruptive conversations with fellow students, regular tardiness, leaving the classroom during class time, use of electronic devices, and eating or drinking in class. Students are expected to abstain from texting or using social media during class time. Answering or making phone calls from the classroom is strictly forbidden.

**Guests And Children:** Only authorized persons are allowed in the classrooms. College liability coverage does not extend to guests or children and thus they are not allowed in the classroom.

**Academic Honesty:** According to the *Shasta College Student Handbook* and the *Shasta College Catalog*, there are a number of unauthorized behaviors that violate the campus academic honesty policy. Each student should become familiar with the policy. Failure to acknowledge the work of other scholars constitutes an egregious breach of ethics and is a violation of civil law. You must, in all cases, do your own work, acknowledge sources, and document them appropriately. Otherwise, disciplinary sanctions will be applied. If you have any questions about plagiarism, please do not hesitate to contact me. In other words, cheating of any sort will not be tolerated and will result in an “F” for the assignment, quiz, or exam, and the case may be reported to Student Services.

**Student Conduct And Discipline:** In accordance with the Student Code of Conduct (Board Policy 5500), students are expected to obey all California State laws and all Federal laws that pertain to behavior on a college campus. Shasta College’s jurisdiction and discipline shall be limited to conduct that occurs on Shasta College premises or that is related to school activities. Any student found to have committed misconduct is subject to the disciplinary sanctions outlined in Board Policy, Section 5520.

**Academic Accommodations Imposed By A Disability:** Academic adjustments due to a disability or serious medical condition: Students should contact the office of Partners in Access to College Education (PACE) for authorization of academic adjustments (accommodations) for this course. The office is located in room 2006 (242-7790). Students will need to provide documentation that verifies the condition and the type of limitations that may result. The staff in PACE have been designated with the authority to 1) evaluate that documentation, 2) determine which academic adjustments are appropriate to this course, and 3) facilitate the provision of approved academic adjustments. Students will submit notices directly to the course instructor regarding specific academic adjustments that are authorized for this class.

**Dropping:** If a student misses two consecutive weeks of class or more it may be assumed they are no longer interested in the course. School policy notes that these students may be dropped by the instructor either on census day or via the instructor initiated drop process. Nevertheless, if the student decides to stop attending, it is always the student’s responsibility to officially drop or withdraw from the class.

**Non-Discrimination:** The Shasta-Tehama-Trinity Joint Community College District (“Shasta College”) does not discriminate against any person on the basis of race, color, national origin, sex, religious preference, age, disability (physical and mental), pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), gender identity, sexual orientation, genetics, military or veteran status or any other characteristic protected by applicable law in admission and access to, or treatment in employment, educational programs or activities at any of its campuses. Shasta College also prohibits harassment on any of these bases, including sexual harassment, as well as sexual assault, domestic violence, dating violence, and stalking.

Note: *This syllabus is subject to change at the discretion of the instructor.*

Last modified: 7/30/18

## Math 114

**Prerequisite:** A grade of C or higher in MATH 230E, MATH 240 or MATH 260, or Math Placement Level 2 or higher

**Advisory:** A grade of C or higher in ENGL 280, or English Placement Level 5 or higher

**Description:** This is an accelerated course that prepares students, who do not plan to major in math, science, computer science, or business, for transfer-level statistics. Topics include ratios, rates, and proportional reasoning, arithmetic reasoning using fractions decimals and percents, evaluating expressions, analyzing algebraic forms to understand statistical measures, functions, use of linear and exponential functions to model bivariate data, use of logarithms, logarithmic scales and semi-log plots, graphical and numerical descriptive statistics for quantitative and categorical data. **Units:** 5.0  
**Note:** Students may take either MATH 101 and MATH 102, or MATH 114 in order to meet the prerequisite for MATH 14. Successful completion of both MATH 101 and MATH 102 is the equivalent of MATH 114.

### Course Objectives:

Upon successful completion of the course the student will be able to:

1. Formulate questions that can be addressed with data, then organize, display and analyze relevant data to address these questions and communicate results.
2. Apply the basic principles of study design to develop and analyze the validity of simple experiments and sampling plans related to a given situation and goal.
3. Apply numerical and algebraic reasoning skills to support statistical analysis.
4. Construct, use and interpret mathematical models, specifically linear and exponential functions to represent relationships in quantitative data.
5. Apply effective learning strategies for success in college.

### Course Content:

- 1. Formulate questions that can addressed with data, then organize, display, and analyze relevant data to address these questions and communicate results**
  - A. Graphically represent the distribution of categorical and quantitative data  
Construct and read dotplots, histograms, cumulative frequency distributions, bar charts and pie charts
  - B. Use graphical representations to investigate patterns and trends in data  
Use fractions, decimals and percents to interpret bar charts and pie charts  
Recognize and generate equivalent forms of fractions, decimals, and percents  
Compare fractions, decimals and percents
  - C. Compare related data sets using numerical measures and appropriate graphical representations and communicate finding in the context of the data
  - D. Investigate relationships in bivariate quantitative data, display a scatterplot, describe its shape, and determine regression coefficients, regression equations, and correlation coefficients using technological tools and communicate findings in the context of the data
  - E. Set-up two-way tables for bivariate categorical data and use appropriate marginal and conditional percents to investigate relationships and answer questions.
- 2. Apply the basic principles of study design to develop and analyze the validity of simple experiments and sampling plans related to a given situation and goal.**
  - A. The purpose of randomization in the experiment design
  - B. Explanatory, response, and confounding variables
  - C. Simple random sample
  - D. Statistical bias
  - E. Bias due to under-coverage, non-response, interviewer behavior or characteristics, question wording, or aspects of the survey that influence responders

F. Difference between correlation and causation and the connection of these concepts to observational studies and random, controlled experiments.

### **3. Demonstrate numerical and algebraic reasoning skills to support statistical analysis.**

A. Numerical reasons skills.

1. Understand the place-value structure of the base-ten number system and be able to represent and compare rational numbers, including negative rationals, in decimal form and find their approximate location on a number line.
2. Recognize, generate, and fluently use equivalent forms of fractions, decimals, and percents.
3. Identify, compare, and explain the contextual meaning of fractions that represent the marginal distribution of a single categorical variable.
4. Identify, compare, and explain the contextual meaning of fractions that represent the relationship of two categorical variables in conditional distribution.

B. Algebraic reasoning skills

1. Understand the concept of a variable and a function, and interpret functions as communicating relationships between variables
2. Recognize the difference between variables and parameters in general forms of linear and exponential models, e.g., in  $y = mx + b$ ,  $x$  and  $y$  are variables while  $m$  and  $b$  are the parameters that define a specific line
3. Use interval notation and inequalities
4. Understand absolute value as one-dimensional distance

### **4. Construct, use and interpret mathematical models, specifically linear and exponential functions, to represent relationships in quantitative data.**

- A. Identify trends in bivariate quantitative data and determine the class or classes of functions (linear, exponential, or none of these) that could reasonably model the data
- B. Define variables in a context using appropriate units
- C. Use linear regression on  $x$ ,  $y$  or  $x$ ,  $\log(y)$  to find an appropriate linear and exponential model
- D. Analyze what the model assumes about how one variable changes with respect to the other
- E. Draw reasonable conclusions about a situation being modeled
- F. Interpret the correlation coefficient as a measure of spread of data about the least squares regression line
- G. Interpret the square of the correlation as the percent of variation in  $y$  or  $\log(y)$  that can be explained by  $x$
- H. Explain the difference between causation and correlation and identify the confusion of these concepts as a fallacy

### **5. Use effective learning strategies for success in college.**

- A. Attend class regularly and are punctual in turning in assignments
- B. Work productively with peers on group assignments
- C. Seek help from peers, instructor, and other resources when necessary
- D. Use rubric criteria to assess performance on assignments and make improvements
- E. Meet with a counselor to develop an educational plan

### **Expected Student Learning Outcome:**

Upon successful completion of the course, students will be able to accurately apply steps of problem solving to solve a problem as follows:

- 1) Collect, organize, analyze, and interpret data using various methods including statistical software and graphing calculators.
- 2) Create, interpret, and manipulate relevant algebraic models in one and two variables based on various data sets.
- 3) Demonstrate effective learning strategies for success in college.

## Math 14

**Prerequisite:** A grade of C or higher in MATH 102, MATH 114, or Math Placement Level 4 or higher

**Advisory:** A grade of C or higher in ENGL 190, or English Placement Level 6 or higher

**Description:** An introductory course in statistics designed to show the role of modern statistical methods in the process of decision making. Concepts are introduced by example rather than by rigorous mathematical theory. The following topics will be covered: measures of central tendency and dispersion, regression and correlation, probability, sampling distributions, including the normal,  $t$ , and chi-square, statistical inference using confidence intervals and hypothesis testing. This course may be offered in a distance education format. **Units:** 4.0

**Course Objectives:** Upon successful completion of this course, the student will be able to:

1. Distinguish among different scales of measurement and their implications.
2. Organize statistical data, and interpret data displayed in tables and graphically.
3. Find the 5-number summary of a data set, and calculate the mean, variance, and standard deviation of a discrete distribution.
4. Identify the standard methods of obtaining data, and identify advantages and disadvantages of each.
5. Find the probability of an event.
6. Find the probability of a compound event consisting of independent, dependent or mutually exclusive events.
7. Compute probability of an event using the binomial and normal distributions.
8. Distinguish the difference between sample and population distributions, and analyze the role played by the Central Limit Theorem.
9. Find and interpret confidence intervals for population means and population proportions.
10. Determine and interpret levels of statistical significance, including p-values.
11. Identify the basic concept of hypothesis testing, including Type I and II errors.
12. Test hypotheses about sample means and difference of two sample means using the normal distribution and large sample theory.
13. Test hypotheses about sample means and difference of two sample means using the  $t$  distribution and small sample theory.
14. Use CHI-square distribution to test hypotheses concerning contingency tables and "goodness of fit."
15. Select the appropriate technique for testing a hypothesis, and interpret the result.
16. Find the linear regression of a variable upon another variable.
17. Use linear regression for estimation and inference, and interpret the associated statistics.
18. Use ANOVA for estimation and inference, and interpret the associated statistics.
19. Use technology in statistical analysis, and interpret the output of a technology-based statistical analysis
20. Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life science, health science, and education.

### Expected Student Learning Outcome:

Upon successful completion of the course, students will be able to accurately apply steps of problem solving to solve a problem as follows:

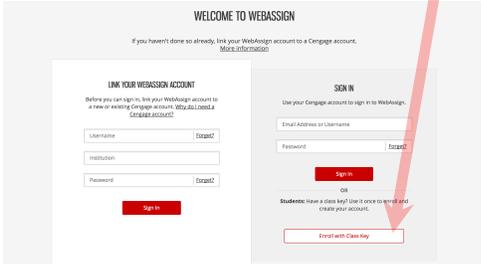
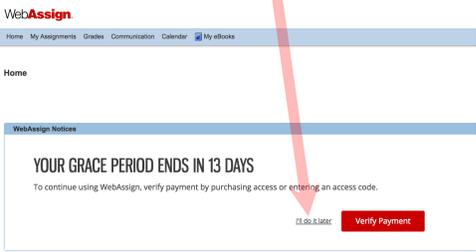
- 1) Demonstrate understanding of the problem
- 2) Choose an appropriate problem-solving strategy
- 3) Effectively solve the problem using the chosen strategy
- 4) Clearly state the correct solution to the problem

Fall 2018

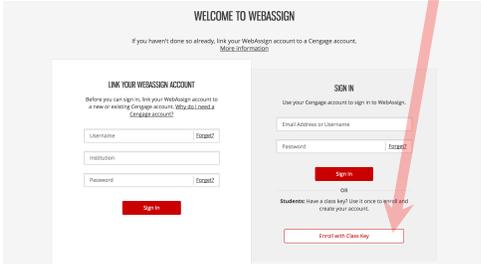
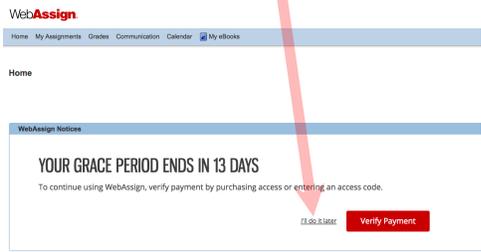
Schedule for Professor Debra Griffin

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	<i>8:00 – 9:00</i> <b>Office Hour</b> Room 7310 (or 7210)		<i>8:00 – 9:00</i> <b>Office Hour</b> Room 7310 (or 7210)		
8:15					
8:30					
8:45					
9:00	<i>9:00 - 11:15</i> <b>Math 102</b> <b>F1847</b> Room 7210		<i>9:00 - 11:15</i> <b>Math 102</b> <b>F1587</b> Room 7210		
9:15					
9:30					
9:45					
10:00					
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10:45					
11:00					
11:15					
11:30					
11:45					
12:00	<i>12:00 - 2:15</i> <b>Math 114/14</b> <b>F0714</b> Room 7210	<i>12:00 - 2:15</i> <b>Math 114/14</b> <b>F0714</b> Room 7210	<i>12:00 - 2:15</i> <b>Math 114/14</b> <b>F0714</b> Room 7210	<i>12:00 - 2:15</i> <b>Math 114/14</b> <b>F0714</b> Room 7210	
12:15					
12:30					
12:45					
1:00					
1:15					
1:30					
1:45					
2:00					
2:15	<i>2:15 – 3:15</i> <b>Office Hour</b> Learning Center	<i>2:15 – 3:15</i> <b>Office Hour</b> Learning Center	<i>2:15 – 3:15</i> <b>Office Hour</b> Learning Center	<i>2:15 – 3:15</i> <b>Office Hour</b> Learning Center	
2:30					
2:45					
3:00					
3:15					
3:30		<i>3:30 – 5:50</i> <b>Math 260</b> <b>F1389/F1390</b> <b>F1391/F1392</b>		<i>3:30 – 5:50</i> <b>Math 260</b> <b>F1389/F1390</b> <b>F1391/F1392</b>	
3:45					
4:00					
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6:00					
6:15					

Instructions for registering in the WebAssign webservice for this class

<p>1. At WebAssign.net, click on</p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Enroll with Class Key</b></p> 	<p>2. Enter shastacollege 0969 3585, click on</p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Enroll</b></p> <p style="text-align: center;"><b>ENROLL WITH CLASS KEY</b></p> <p>Enter the Class Key that you received from your instructor. You will only need to complete this once. After you have created your account, you can log in on the main page.</p> <p style="text-align: center;"> <input type="text" value="shastacollege"/> <input type="text" value="0969"/> <input type="text" value="3585"/> </p> <p style="text-align: center;"><i>Class Keys generally start with an institution code, followed by two sets of four digits.</i></p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Enroll</b></p>		
<p>3. Choose</p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Yes, this is my class</b></p> <p style="text-align: center;"><b>YOUR CLASS KEY HAS BEEN RECOGNIZED</b></p> <p style="text-align: center;">Verify Class Information</p> <div style="border: 1px solid gray; padding: 5px; margin: 10px auto; width: 80%;"> <p><b>Course:</b> Math 114 – F0714  <b>Instructor:</b> Debra Griffin  <b>Institution:</b> Shasta College, CA</p> </div> <p style="text-align: center;"> <input type="button" value="No, this is not my class"/> <input style="border: 1px solid red; padding: 2px 10px;" type="button" value="Yes, this is my class"/> </p>	<p>4. Enter personal data and password of your choosing, then click on</p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Create Account</b></p> <p style="text-align: center;"><b>CREATE ACCOUNT</b></p> <p style="text-align: center;"><small>Create a Cengage account for increased security and access to a wide range of learning resources in addition to WebAssign.</small></p> <p style="text-align: center;"> <input type="text" value="Email Address"/>  <input type="text" value="First Name"/>  <input type="text" value="Last Name"/>  <input type="text" value="Password"/>  <input type="text" value="Re-enter Password"/> </p> <p style="text-align: center;"><small>To continue using WebAssign, you must accept the terms of the <a href="#">Cengage Learning Service Agreement</a>.</small></p> <p style="text-align: center;"><input checked="" type="checkbox"/> I have read and agree to the <a href="#">CengageBrain Service Agreement</a></p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>Create Account</b></p>		
<p>5. When class begins, you can choose</p> <p style="text-align: center; border: 1px solid red; padding: 2px;"><b>“I’ll do it later”</b></p> 	<p>6. Payment (within 13 days) can be made by</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%; padding: 10px;"> <p><b>Online Instant Access</b></p> <p>Cost: \$33.95 credit card only</p> </td> <td style="width: 50%; padding: 10px;"> <p><b>Bookstore Access Code</b></p> <p>Cost: \$50 textbook vouchers ok</p> </td> </tr> </table>	<p><b>Online Instant Access</b></p> <p>Cost: \$33.95 credit card only</p>	<p><b>Bookstore Access Code</b></p> <p>Cost: \$50 textbook vouchers ok</p>
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<b>Math 114, Fall 2018</b>		<b>Calendar</b>			<b>Instructor: Debra Griffin</b>	
Week	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thur</b>	<b>Fri</b>	
1	Aug 20 Syllabus 1.1 Definitions of Statistics, Probability, and Key Terms	Aug 21 1.2 Data Sampling, and Variation in Data and Sampling  <b>Group Quiz #1</b>	Aug 22 1.3 Frequency, Frequency Tables, and Levels of Measurement	Aug 23 1.4 Experimental Design and Ethics  <b>Group Quiz #2</b>	Aug 24	
	Aug 27 1.5 Data Collection Experiment	Aug 28 Review for Exam 1  <b>Group Quiz #3</b>	Aug 29 <b>Exam 1</b> (no make-ups allowed)	Aug 30 2.1 Stem and Leaf Plots, Line Graphs, and Bar Graphs  <b>Group Quiz #4</b>	Aug 31 <i>Last day to register and add full-term class, drop a full-term class without record.</i>	
3	Sep 3 <i>Labor Day Campus Closed</i>	Sep 4 2.2 Histograms, Frequency Polygons, and Time Series Graphs  <b>Group Quiz #5</b>	Sep 5 2.3 Measures of the Location of Data	Sep 6 2.4 Box Plots  <b>Group Quiz #6</b>	Sep 7	
	Sep 10 2.5 Measures of the Center of Data	Sep 11 2.6 Skewness of the Mean, Median, and Mode  <b>Group Quiz #7</b>	Sep 12 2.7 Measures of the Spread of Data	Sep 13 2.8 Descriptive Statistics  <b>Group Quiz #8</b>	Sep 14	
5	Sep 17 Review for Exam 2 <b>Group Quiz #9</b>	Sep 18 <b>Exam 2</b> (no make-ups allowed)	Sep 19 3.1 Probability Terminology	Sep 20 3.2 Independent and Mutually Exclusive Events  <b>Group Quiz #10</b>	Sep 21 <i>Last day to declare pass/no pass option</i>	
	Sep 24 3.3 Two Basic Rules of Probability	Sep 25 3.4 Contingency Tables <b>Group Quiz #11</b>	Sep 26 3.5 Tree and Venn Diagrams	Sep 27 3.6 Counting Principles  <b>Group Quiz #12</b>	Sep 28	
7	Oct 1 Review for Exam 3 <b>Group Quiz #13</b>	Oct 2 <b>Exam 3</b> (no make-ups allowed)	Oct 3 4.1 Probability Distribution Function for a Discrete Random Variable	Oct 3 4.2 Mean, Expected Value, and Standard Deviation of Discrete Random Variable  <b>Group Quiz #14</b>	Oct 4	
	Oct 8 4.3 Binomial Distribution	Oct 9 4.4 Geometric Distribution  <b>Group Quiz #15</b>	Oct 10 4.5 Hypergeometric Distribution	Oct 11 4.6 Poisson Distribution  <b>Group Quiz #16</b>	Oct 12	
9	Oct 15 Review for Exam 4	Oct 16 <b>Exam 4</b> (no make-ups allowed)	Oct 17 Review for final exam	Oct 18 <b>Math 114 Final Exam Chapters 1 – 4 12:00 noon – 2:15 pm</b>	Oct 19	

<b>Math 14, Fall 2018</b>		<b>Calendar</b>			<b>Instructor: Debra Griffin</b>	
Week	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thur</b>	<b>Fri</b>	
10	Oct 22 5.1 Continuous Probability Functions	Oct 23 5.2 The Uniform Distribution  <b>Group Quiz #17</b>	Oct 24 5.3 The Exponential Distribution	Oct 25 5.4 Continuous Distribution  <b>Group Quiz #18</b>	Oct 26	
	Oct 29 Review for Exam 5 <b>Group Quiz #19</b>	Oct 30 <b>Exam 5</b> (no make-ups allowed)	Oct 31 6.1 The Standard Normal Distribution	Nov 1 6.2 Using the Normal Distribution  <b>Group Quiz #20</b>	Nov 2	
12	Nov 5 6.3 Normal Distribution Experiment	Nov 6 Review for Exam 6 <b>Group Quiz #21</b>	Nov 7 <b>Exam 6</b> (no make-ups allowed)	Nov 8 7.1 The Central Limit Theorem for Sample Means  <b>Group Quiz #22</b>	Nov 9 <b>Veteran's Day</b> No Classes	
13	Nov 12 7.2 The Central Limit Theorem for Sums	Nov 13 7.3 Using the Central Limit Theorem <b>Group Quiz #23</b>	Nov 14 7.4 The Central Limit Theorem Experiment	Nov 15 Review for Exam 7  <b>Group Quiz #24</b> Last day to withdraw from a full-term class with a "W"	Nov 16	
	Nov 19   <-----	Nov 20 -----	Nov 21 -----	Nov 22 -----	Nov 23 ----->	
14	Nov 26 <b>Exam 7</b> (no make-ups allowed)	Nov 27 8.1 A Single Population Mean using the Normal Distribution <b>Group Quiz #25</b>	Nov 28 8.2 A Single Population Mean using the Student "t" Distribution	Nov 29 8.3 A Population Proportion  <b>Group Quiz #26</b>	Nov 30	
	Dec 3 8.4 Confidence Interval (Home Costs)	Dec 4 8.5 Confidence Interval (Place of Birth) <b>Group Quiz #27</b>	Dec 5 <b>Exam 8</b> (no make-ups allowed)	Dec 6 9.1 Null and Alternative Hypotheses  <b>Group Quiz #28</b>	Dec 7	
16	Dec 10 9.2 Outcomes and the Type I and Type II Errors	Dec 11 9.3 Distribution Needed for Hypotheses Testing <b>Group Quiz #29</b>	Dec 12 9.4 Rare Events, the Sample, Decision and Conclusion	Dec 13 9.5 Additional Information and Full Hypothesis Test Examples  <b>Group Quiz #30</b>	Dec 14	
17	Dec 17 9.6 Hypothesis Testing of a Single Mean and Single Proportion	Dec 18 <b>Exam 9</b> (no make-ups allowed)	Dec 19 Review for final exam	Dec 20 <b>Math 14 Final Exam</b> <b>12:00 noon – 2:15 pm</b>	Dec 21	