Reedley College Spring 2019

Math-11-52234, 59910, Elementary Statistics Syllabus

And Math 11C -54649 Elementary Statistics with Support Syllabus

- Math 11- 52234-MTWTH 8:00-8:50 AM, Room CCI-206
- Math 11 – 59910-T,Th 11:00 – 12:50 CCI 201
- Math 11C- 54659 MTWTHF 9:00 – 9:50 CCI 206

Instructor: Veronica Andrade-Romeo
Office: FEM 4A
Office Hours: Monday and Wednesday 11:00 – 11:50, and Fridays 10:00 – 11:50 if these hours don't work please email me and we'll find a time to meet.
Email: maria.andrade-romeo@reedleycollege.edu

Prerequisites: none

Course Description:

Math 11 and Math 11C is an introduction to statistical methods and techniques for business, behavioral, and social science majors. Topics include descriptive measures of central tendency and variability, probability, binomial and normal distributions, random variables, sampling, estimating, hypothesis testing (parametric and nonparametric), correlation and regression. Math 11C includes support material.

Text

Triola, "Elementary Statistics" 13th Edition
You have two options 1) purchase the MyStatLab Access Card **only** or 2) Purchase the textbook + MyStatLab Access Card

Required Material:

- Triola, "Elementary Statistics" 18 week MyStatLab Access Card.

The best and cheapest way to purchase the access card is with a credit card through CANVAS. You may also purchase it at the bookstore but it will cost a little more.

- Graphing calculator or Excel. If you cannot get a graphing calculator, then get any calculator (does not have to be expensive, not your cell phone) and you must bring it to class every day to receive full participation points.

(I may drop students at any time starting on Thursday 1/17/19 through 3/17/19) Here are the reasons why you may be dropped:

- **You may be dropped if** you have not signed up for MyStatLab by Thursday 1/17/18. Whether you purchase the access code online or at the bookstore You **MUST** register through CANVAS (I do not give you a course ID). You must either purchase it by 1/17/19 or you may start their 14-day free trial. If you have trouble registering, you may go to the Math Center anyone in a vest can help just tell them that you have to register through CANVAS or you can come into my office hours. It is crucial that you figure this out to avoid being dropped, I will show you how to do this during class.
- **You may be dropped if** You have 2 or more absences by January 24, 2019
- **You may be dropped if** you have 3 or more absences by January 31, 2019

- **You may be dropped if** You have 6 or more absences by March 14, 2019.
- **You may be dropped if** You do not have a **PAID** subscription to MyStatLab by January 24, 2019. Please communicate with me if you cannot purchase the access code by January 24, 2019.
  Note: If <u>you</u> want to drop the class, make sure you do so on Webadvisor. Do not depend on me to drop you.

Absences and tardies:

- There are no excused absences, emailing me or calling me does not excuse an absence.
- If you arrive after I take attendance but less than 20 minutes late you will be marked tardy, or if you leave less than 20 minutes early you will be marked tardy. (Make sur to write your name on the board if you arrive tardy so that I remember to change your status from absent to tardy)
- Every 3 tardies count as an absence and it will count towards being dropped and towards your participation grade.
- If you arrive more than or equal to 20 minutes late or leave more than or equal to 20 minutes early then you will be marked absent and it counts as an absence towards being dropped and towards your participation grade. (If you arrive this late, you do not have to write your name on the board, since I will not change your status).

Classroom Behavior:

1. Absolutely no cell phones (You may lose the participation points for the day and you may also be dismissed. Unless we are using them as part of the lesson.)
2. Do not pack up early.
3. In general, be considerate. We are here to learn.
4. Be on time.

Important Dates:

1/25/2019: Census-Last Day to ADD/Drop a full-term class
2/1/2019: Last day to drop to avoid a "W"
3/15/2019: Final Drop Deadline

- Math 11-52234 M-Th 8:00 – 8:50 Final Exam: Wednesday May 22, 2019
- Math 11-59910 T,Th 11:00 – 12:50 Final Exam: Tuesday May 21, 2019
- Math 11C-54659 M-F 9:00 – 9:50 Final Exam: Monday May 20, 2019

Grading:

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

Tests: 70% **NO RETAKES and NO MAKE-UPS**
Homework 20%
Quizzes: 5% **NO RETAKES AND NO MAKE-UPS, If I give an in-class pop-quiz and you are not there to take it you may not make it up or retake it.**
Participation: 5% (follow instructions and participate in each class session)

Your grade is the grade on CANVAS (your grade is NOT the grade on MyStatLab)

Testing

Follow directions, be prompt, NO CELL PHONES allowed, Testing must be completed in a single sitting you may not leave the room. The SCCCD policy regarding ACADEMIC DISHONESTY will be applied when appropriate.

Academic Dishonesty

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Students with Disabilities:

If you have any special needs addressed by the American Disability Act and need course materials in alternate modes, or alternate testing circumstances, it is your responsibility to notify me as soon as possible. Upon notification, immediate reasonable efforts will be made to accommodate your special needs.

Please refer to SCCCD policies for guidance on all matters relating to this course

Student Learning Outcomes:

Upon completion of this course, students will be able to:

1. Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by using tables, graphs, measures of central tendency, and measures of dispersion.
2. Apply concepts and terminology of statistics.
3. Implement the rules of probability.
4. Collect data, interpret and communicate the results using statistical analyses such as confidence intervals, hypothesis tests, and regression analysis.

Course Objectives:

In the process of completing the course, the student will:

A. Summarize and describe given data sets
B. Apply the methods of descriptive statistics to determine the measures of central tendency and variability to a variety of problems.
C. Apply basic principles of probability to determine probabilities of a variety of events.
D. Analyze discrete and continuous probability distributions.
E. Explore the basics of sampling theory.
F. Estimate population parameters through studying confidence intervals.
G. Examine hypothesis testing for small and large samples and multiple populations.
H. Determine if a relationship exists between quantitative variables.

Course Outline

A. Introduction to Statistics
   1. Statistical data
   2. Frequency distributions
   3. Graphs
B. Population Parameters and Sample Statistics
   1. Measures of central tendency.
      a. Mean
      b. Median
      c. Mode
   2. Measures of Variability
      a. Standard deviation
      b. Quartiles
      c. Range
C. Probability
   1. Rules of probability, random variables, and expected value.
   2. Discrete and continuous probability distributions.
      a. Binomial Distribution
      b. Hypergeometric Distribution
      c. Poisson Distribution
D. Sampling Theory
   1. Simple random sample
   2. Central Limit Theorem
E. Estimating Population Parameters
   1. Estimating from a small or large sample.
   2. Sample size.
F. Hypothesis Testing (Parametric/Nonparametric)
   1. One population, one and two sided tests.
      z-test for means and proportions.
      t-test for means (independent and dependent samples)
   2. Two populations, sampling distributions
   3. Chi-squared (Goodness of Fit and Contingency Tables)
   4. Analysis of Variance (ANOVA)
G. Correlation and Simple Linear Regression
   1. Correlation coefficient
   2. Regression coefficient
   3. Test of hypothesis about the value of correlation/regression coefficient.

Ms. Andrade-Romeo reserves the right to make changes the syllabus with whole class notification.