## MATH 11 – ELEMENTARY STATISTICS (#59911) Course Id: perez61547 Spring 2019

Instructor: Mr. Conrad Perez Class Time: MW 1:00 PM – 2:50 PM Classroom: CCI-200 Office: FEM-1H Office Hours: MWF: 10:00 AM – 11:00 AM; TTH: 8:00 AM – 9:00 M; or by appointment Phone: 638-3641 ext. 3255 E-Mail: conrad.perez@reedleycollege.edu

Textbook (Optional): Essentials of Statistics (Fifth Edition) by Triola

Web Access (Required): Course Compass access code must be purchased

## **Computer Requirements**:

	<b>Operating systems</b>	browsers
Windows	Windows 10	Edge 12 or newer Firefox 45 or newer Chrome 49 or newer
	Windows 7, 8, and 8.1	Internet Explorer 11 Firefox 45 or newer Chrome 49 or newer
Mac OS	OS X 10.12 - Sierra	Safari 10 Firefox 45 or newer Chrome 49 or newer
	OS X 10.11 - El Capitan	Safari 9 or newer Firefox 45 or newer Chrome 49 or newer
	OS X 10.10 - Yosemite	Safari 8 or newer Firefox 45 or newer Chrome 49 or newer
	OS X 10.9 - Mavericks	Safari 7 or newer Firefox 45 or newer Chrome 49 or newer

- Internet Connection: Cable/DSL, T1 or other high-speed connection. You <u>cannot</u> use a dial-up modem for the course.
- Adobe Acrobat Reader

Important Dates: Drop Deadline- Fri. Mar 15, 2019.

Days Off- Mon. Jan 21; Fri. Feb 15; Mon. Feb 18; Mon.-Fri. April 15 - 19. Final Exam- Mon. May 20, 2019 from 1:00 PM to 2:50 PM

**Course Prerequisites:** C or better grade in Math 103 or equivalent.

**Course Overview:** The course will cover all or parts of chapters 1-10, and chapter 11 if time permits. The course objective is to obtain a solid understanding of the following concepts and problems dealing with statistics:

1. Distinguish among different scales of measurement and their implications;

2. Identify the standard methods of obtaining data and identify advantages and disadvantages of each;

3. Interpret data displayed in tables and graphically;

- 4. Calculate measures of central tendency and variation for a given data set;
- 5. Apply concepts of sample space and probability;
- 6. Calculate the mean and variance of a discrete distribution;

7. Calculate probabilities using normal and t-distributions;

8. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem;

9. Construct and interpret confidence intervals;

- 10. Determine and interpret levels of statistical significance including p-values;
- 11. Interpret the output of a technology-based statistical analysis;
- 12. Identify the basic concept of hypothesis testing including Type I and II errors;
- 13. Formulate hypothesis tests involving samples from one and two populations;
- 14. Select the appropriate technique for testing a hypothesis and interpret the result;
- 15. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics; and

16. 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.

**Attendance:** After 3 absences, students may be dropped from the class. Late arrival and leaving class early will be considered as an absence. Any canceled classes will have a note posted on the classroom door.

**Behavior:** 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, sleeping, and leaving the classroom during class time. Students are expected to turn off all cell phones and other electronic devices during class time.

Assignments: There will be 7-9 exams worth 200 points apiece. Homework assignments will be worth 10 points apiece and these will done online at <a href="http://www.pearsonmylabandmastering.com">http://www.pearsonmylabandmastering.com</a>. A student with 3 consecutive 0s on the homework may be dropped from the course. Quizzes will be worth 1-10 points each.

Some homework, quizzes, and/or extra credit may be assigned as group work during the semester. No homework will be accepted after its due date nor any make-up exams given <u>without prior arrangements</u> being made before the homework's due date or before the exam. A student caught cheating will receive an F on the assignment and/or may be dropped from the course.

**Grading:** The course grade is based upon the points earned from the homework, quizzes, exams, extra credit, and the final. At any time during the course, the grade of a student is determined as follows:

 $\frac{Points Earned}{Total Points Possible} x 100 = grade of the student$ 

The grade will be based upon the following percentages (**NO ROUNDING**): 90-100% A 80-89% B 70-79% C 65-69% D 0-64% F

**Note:** If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.