Math 119-Elementary Statistics
Summer 2013

General Information

Name	Dr. Voldman	Textbook/Author	Essentials of Statistics by Mario F. Triola 4th edition
Office	Room 2764	Chapters Covered	1-11
Phone	355-6299		**Credit Units**: 4 Time: MTWTF 7:30-10:20 **CRN**: 30032
E-mail	alex.voldman@imperial.edu	IVC Prerequisite with C or better	Math 91 (Intermediate Algebra)

Grading Scale

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

Grade Distribution

Exams	Final
400 points	100 points

Exams	80%
Final	20%

General Guidelines

1. Late work (homework, projects, etc) is not accepted	5. Bring your book, ruler to class every day
2. School policy: No food or beverages are allowed in the classroom	6. It is your responsibility to drop before the W deadline
3. Missed assignments are recorded as zeros	7. It is your responsibility to keep notes, syllabus, handouts
4. School policy: No children are allowed in the classroom	

Course Description:

Graphical representation of statistical data, calculations, and uses of various averages, measures of variability, introduction toprobability, probability distributions, confidence intervals, sample size determination and hypothesis testing, ANOVA, linear regression and Chi-square analysis. Students will learn to use technology to find confidence intervals, test statistics, regression lines, and to produce graphics. This course also provides supervised practice in the appropriate use of technology designed to assist students in calculations required in beginning statistics.

Course Objectives:

Distinguish the various ways of organizing, displaying, and measuring data.
2. Derive the numerical relationship that exists between bivariate data sets.
3. Demonstrate an understanding of the theory of probability and proficiency in solving problems of this nature.
4. Compute and interpret expected values and variance, and learn about the binomial distribution for discrete random variables.
5. Compute and interpret expected values and variance, and learn about the normal distribution or continuous random variables.
6. Examine the joint probability structure of two or more random variables and understand the limiting behavior of the sum of independent random variables as the number of the sample becomes larger.
7. Use the various types of distributions that are derived from the normal distribution.
8. Calculate and interpret confidence intervals for a population mean to show how probability connects to this type of statistical inference.
9. Use hypothesis testing as a formal means of distinguishing between probability distributions on the basis of random variables generated from one of the distributions.
10. Compare the means of the data from experiments involving more than two samples, including the single factor analysis of variance (ANOVA).
11. Fit a straight line to the given data in graphical form.
12. Make use of Chi-square distributions to analyze counts.

SLO:

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
Identify, compare, and contrast two articles that include both descriptive and inferential statistics on the same research topic. (ILO2, ILO4)

Apply their knowledge of statistical inference to conduct formal significance tests concerning single populations. (ILO2)

Demonstrate their knowledge of basic descriptive statistics. (ILO2, ILO4)

Apply techniques of linear modeling to explore the relationship between two numerical variables. (ILO2)

Attendance and Absences:

If you are 5 minutes late you will be marked absent. Do not make doctor, counseling, or any appointments during class time. . Leaving during lecture will be considered an unexcused absence. If you have to leave anytime during class, other than established break times, you must inform your instructor. After the third unexcused absence, you will be dropped from the class. In other cases, it is your responsibility to drop yourself before the withdrawal deadline. Disruptive and inconsiderate behavior will not be tolerated!

Cheating and Plagiarism

Dishonesty in the classroom is considered a very serious offense. Any form of cheating, turning in work which is not one's own (plagiarism), is grounds for disciplinary action. The consequences of these actions are severe and may include the possibility of expulsion.

Silence pagers and cell phones. Use of cell phones in the class room will not be permitted; you should not bring one into the classroom unless the ringer is turned OFF.

Exams

Purpose: To review the material introduced in class and to evaluate your understanding of the material covered in the course. There will be no make up exams given. Zeros will be given for all missed tests.

Final Exam (comprehensive)

Learning Resources

1. Me: Office Hours; just walk-in and get help. Appointment hours; you must give at least one day advance notice
2. Tutorial services: Library, Vocational Education Building Room 1701
3. Study Guides: The bookstore has textbooks for sale

Any student with a documented disability who may need educational accommodations should notify the instructor or DSPS office as soon as possible (DSPS, Room 2117, Health Sciences Building, (760) 355-6312)