IMPERIAL VALLEY COLLEGE

MATH 119

Elementary Statistics
Course Syllabus

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Course Title:	Elementary Statistics
Course Schedule/ Time:	Wednesday 05:30 PM - 09:45 PM
Course Location:	Main Campus, 2700 Building, Room 2723
Book:	Essentials of Statistics, 4E, Mario Triola ISBN
Electronic Resources:	MyStatLab can be purchased separately.
Instructors Name:	Carlos Canez
Telephone:	Please Leave a Message Cell: 760-622-6589
E-Mail Address	carlos.canez@imperial.edu
Calculator	**TI-83/84 is required**. You are NOT ALLOWED to share calculators during tests. Calculators may be rented from the Math Lab by paying a fee at the Cashier's window, then take the receipt to the math lab to get a calculator.

Course Description

Graphical representation of statistical data, calculations, and uses of various averages, measures of variability, introduction to probability, 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.

Student Learning Outcomes for Math 119

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Identify, compare, and contrast two articles that include both descriptive and inferential statistics on the same research topic.
2. Students will apply their knowledge of statistical inference to conduct formal significance tests concerning single populations.
3. Students will demonstrate their knowledge of basic descriptive statistics.
4. Students will apply techniques of linear modeling to explore the relationship between two numerical variables.

Course Objectives:

1. The student will distinguish the various ways of organizing, displaying, and measuring data.
2. The student will derive the numerical relationship that exists between bivariate data sets.
3. The student will demonstrate an understanding of the theory of probability and proficiency in solving problems of this nature.
4. The student will compute and interpret expected values and variance, and learn about the binomial distribution for discrete random variables.
5. The student will compute and interpret expected values and variance, and learn about the normal distribution for continuous random variables.
6. The student will 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. The student will use the various types of distributions that are derived from the normal distribution.
8. The student will calculate and interpret confidence intervals for a population mean to show how probability connects to this type of statistical inference.
9. The student will 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. The student will compare the means of the data from experiments involving more than two samples, including the single factor analysis of variance (ANOVA).
11. The student will fit a straight line to the given data in graphical form.
12. The student will make use of Chi-square distributions to analyze counts.

Grade Make-up

Test …….. 45%
Projects/ Homework …. 40%
Final …….. 15%

Policies and Procedures

Academic Honesty

Academic honesty is highly valued at IVC. You must always submit work that represents your original thoughts and steps. Please see the IVC catalog for more information about academic honesty, including consequences of academic dishonesty.

Late Assignments **No late assignments will be accepted.**

Missed Tests

If you miss a test, the percentage worth of that test will be added to your final test. For example if you miss a test that is worth 15 percent and the final is worth 25 percent your final is now 40 percent of your grade.

Disabled Student Program

Services are provided on an individual basis and may include reader services, note taking, tutoring, counseling, sign language, interpreting, priority registration, learning disability assessment and adapted computer instruction. If there are any modifications you may need, please let me know as soon as possible or call the DSP&S at 355-6312 or go to building 2100.

Attendance

Attendance is mandatory. If you miss more than the allowed two classes I may drop you from the class. Please ***do not assume*** that I will drop you from the class if you stop attending, it is your responsibility to drop the class.

Drop date

The last day to drop with a "W" is November 9 2013.

Learning resources

- Please ask me.
- Tutoring services
- Math lab
- Study Guide
- CD

Two (2) hours of independent work done out of class per each hour of lecture or class work, or 3 hours lab, practicum, or the equivalent per unit is expected.

Final Exam – will be cumulative on December 4

Course Calendar

August	21	Syllabus Chapter 1
	28	2.2 – 2.4
September	4	3.2 – 3.4
	11	Test Ch 2, 3 Lec. on 4.2, 4.3
	18	4.4 – 4.6
	25	5.2 – 5.4
October	2	Test Ch 4, 5 Lec. on 6.2, 6.3
	9	6.4 – 6.6
	16	7.2 – 7.5
	23	Test Ch 6, 7 Lec. on 8.2 – 8.3
	30	8.4 – 8.6
November	6	9.2 – 9.4
	13	10.2, 10.3 **November 9 is the last day to drop with a "W"**
	20	Test Ch 8, 9, 10 Lec. on 11.2, 11.3
	27	11.4 Review
December	4	Final

The scheduled lectures and tests may be subject to change depending on the pace of the class. **These are only tentative dates.**