Basic Course Information

Semester	**Fall 2014**	Instructor Name	**Zhong Wen Hu**
Course Title & #	**Math 119 Elementary Statistics**	Email	**Zhong.hu@imperial.edu**
CRN #	**10429**	Webpage	**http://imperial.blackboard.com** **http://www.mathxl.com** **http://zhongwenhu.wix.com/zhongwenhu**
Room	**2723**	Office	**2765**
Class Dates	**08/18/2014 – 12/13/2014**	Office Hours	**MWF: 8:30 am – 9:30 am** **TTh: 4:35 pm – 5:05 pm** **Or by appointment**
Class Days	**Monday, Wednesday, and Friday**	Office Phone #	**760-355-6489**
Class Times	**10:00 am to 11:15 am**	Office contact if student will be out or emergency	**Ofelia Duarte (Math Department Secretary) 760-355-6155** **Or Silvia Murray 760-355-6201**
Units	**4 units**		

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. (CSU, UC)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
1. Determine and interpret a confidence interval for a population mean. (ILO2, ILO4)
2. Apply statistical inference to conduct formal significance tests concerning single populations. (ILO2)
3. Demonstrate the ability to use technology in computing and interpreting basic descriptive or inferential statistics. (ILO2, ILO4)
4. Apply techniques of linear modeling to explore the relationship between two numerical variables. (ILO2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:
1. 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.

Textbooks & Other Resources or Links

Triola, Mario (2013). Elementary Statistics (Second California Edition). Pearson.ISBN10: 1-256-93644-8. ISBN 13: 1256989851

Calculator: A TI-83 plus or TI-84 plus is essential for your success in this course. You may rent a TI-83 plus from the Math Lab for $10 for the semester. Go first to the cashier in Bldg 10, and then take your receipt to the Math Lab to get your calculator.

Course Requirements and Instructional Methods

Homework

Homework will be assigned at each class meeting. They should be on stapled arranged in the correct order. Please write your name and section number on the top right corner. Late homework will NOT be accepted. No make-up homework. At the end of the semester one lowest homework score will be dropped. It is your responsibility to check the homework assignment even if you are absent. The first 10 minutes of class will be devoted to answering your questions.

You are welcome to use MathXL. Use the course ID: XL1M-51QK-6020-2DI2. However**, you will not receive any credit by doing the homework on MathXL.**

Quiz/Pop-quiz

A quiz may be given at any time during any class period. It may not be announced. The number of quizzes in the semester will be instructor's discretion. The purpose is to provide a feedback on the learning outcome. The lowest quiz scores will be dropped.   The quiz will contribute a small portion of the semester grade.

Tech Activities
There will be a series of four (4) activities in which we use Minitab, Excel, Fathom, or a combination of technology resources to go through statistical computations.

Group Project

There will be one group project toward the end of the semester. Details will be posted on Blackboard.

Tests

There will be four tests. No make-up tests will be given. The lowest score of the chapter tests will be dropped. If a test is missed, it will be the test score that is dropped. The purpose of these tests is to check your

understanding of the concepts covered in the course. Most of the questions on these tests will require showing a significant amount of work. A correct answer with insufficient work will receive partial credit or no credit.

*Bring your own papers and pens/pencils on test days.

Final Exam

At the end of the semester, a COMPREHENSIVE/CUMULATIVE Final Exam will be given. If you miss the final, it will be recorded as a zero.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Grading Policy

(Pop) Quiz	5%
Group Project	5%
4 Tech Activities	10%
Homework	10%
Tests	50%
Final Exam	20%
Total	100%

Grading scale for determining the final grade
A: 90%-100%
B: 80%-89%
C: 70%-79%
D: 60%-69%
F: 0%-59%

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor. **Consider:** specifics for your class/program
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

  Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Help – Discretionary Section and Language

- Blackboard support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library). Please speak to the instructor about labs unique to your specific program.
- Library Services: There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313, if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-

health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Date	Readings &Assignments	Homework & Tests
8/18/14	Syllabus & Introduction	
8/20	1.2, 1.3, 1.4	
8/22	1.4, 2.1	
8/25	2.2, 2.3	
8/27	2.4,2.5	
8/29	3.1, 3.2	
9/1	Labor Day (Campus Closed)	
9/3	3.3, 3.4	
9/5	Review	
9/8	Test 1 Chapter 1, 2, and 3	Homework is due
9/10	4.1, 4.2	
9/12	4.3	
9/15	4.4	
9/17	4.5	
9/19	4.6	
9/22	5.2	
9/24	5.3	
9/26	5.3, 5.4	
9/29	Review	
10/1	Test 2 Chapter 4 and 5	Homework is due.
10/3	6.2	
10/6	6.3	
10/8	6.4, 6.5	
10/10	6.5	
10/13	7.1, 7.2	
10/15	7.3	
10/17	7.4	
10/20	Review	
10/22	Test 3 Chapter 6 and 7	Homework is due.
10/24	8.1, 8.2	

10/27	8.2	
10/29	8.3	
10/31	8.4	
11/3	8.5	
11/5	8.6	
11/7	9.1, 9.2	
11/10	9.3	
11/12	9.4	
11/14	Review	
11/17	Test 4 Chapter 8 and 9	Homework is due
11/19	10.1, 10.2	
11/21	10.3	
12/1	11.3	
12/3	12.2	
12/5	Review	Homework is due
12/8	Final Exam	

Note: The instructor reserves the right to make changes in the syllabus if necessary due to time constraints or other unforeseen events. If so, then members of the class will be notified as soon as possible.