

Basic Course Information

Semester	Spring 2014	Instructor Name	Jill Kitzmiller
Course Title & #	Math 119	Email	jill.kitzmiller@imperial.edu
CRN #	20148	Webpage (optional)	
Room	2723	Office	2768
Class Dates	1/21/14 – 5/15/14	Office Hours	MW 11:20 – 11:50am, W 5 – 5:30, T/TH 8 – 8:30 am, Th 12 – 1:30
Class Days	Wednesday	Office Phone #	(760) 355 - 6296
Class Times	5:30 – 9:45 pm	Office contact if student will be out or emergency	MSE office (760) 355 - 6155
Units	4		

Contacting the Instructor

I will be available during office hours for personal discussion. I endeavor to listen to voice-mail and look at email each day when I am on campus. I DO NOT look at email on the weekends (Friday- Sunday) or on holidays. I do not respond to email regarding absences, unless it is long term. I do not discuss grades over email; this must be done in person.

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.

Prerequisites

MATH 090 or 091 with a grade of "C" or better, or appropriate placement and ENGL 101 or 111 is recommended.

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. Identify, compare, and contrast two articles that include both descriptive and inferential statistics on the same research topic. (ILO2, ILO4)
2. Apply their knowledge of statistical inference to conduct formal significance tests concerning single populations. (ILO2)
3. Demonstrate their knowledge of basic descriptive 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

Math XL computer access is required for all students in this course, the text is included online with your access. The text book is recommended: Essentials of Statistics, 4E, Mario Triola, Math XL is included in packages from the bookstore. A graphing calculator (or one with statistical computation) is needed. I can help with TI-83 or TI-84 models.

Pace of Course and Tips for Success

This course moves rapidly covering the material equivalent to one year of math at the high school level, and meeting for just once each week. For every hour spent in class, you are expected to spend 2 -3 hours outside of class reading the book, doing homework, and studying the material. You cannot learn all of the material by just showing up to class. It is critical that you read ahead and ask questions. Avoid falling behind in the material, reading and homework. If you fall behind it will be difficult to catch up.

You cannot learn mathematics without doing the problems. Stay organized, take good notes and read your notes after class. If you are having difficulty with the material, get help. You can get help from me during office hours or in the Math Lab. Work with others outside of class, form a study group if possible. You are responsible for all material in assigned chapters and all material covered in lecture, even if you are absent, so find someone in class to make you copies of the notes & materials if you cannot be in class.

Course Requirements and Instructional Methods

In class instructional method is lecture based with in class worksheets and activities that correspond to the material covered in lecture. Evaluation is based on in class examinations and out of class homework and assignments.

There will be four in class exams (100 points each) and a comprehensive final examination (150 points). Exams are closed book/closed note and each student must work independently. There are **no make-up exams**. Plan now to be in class on the date of the exams. Any missing exam grade will be recorded as a "0". Your lowest test score will be dropped (excluding the final exam). This can be done only one time.

There will be homework assigned for each chapter in the book. Homework will be done on a computer using the Math XL website. You can purchase access online or at the bookstore. **You will not pass the class if you do not complete any homework!** You may use your own personal computer with internet access or use a computer in the Math Lab. There are 100 points (25 for each assignment) for online homework. **Homework will be due by the date of each exam unless noted** (Homework 4 will be due after chapter 10 is covered). No late

homework will be accepted, but you will be given credit for all homework completed by due date. ***The assigned problems will NOT be enough practice for some students, do as many problems as necessary to feel comfortable with the material.***

There will be approximately 3 extra lab assignments that will be turned in. These labs will be started in class, but finished by the student outside of class. Labs will be due the following class meeting unless otherwise specified. Labs are worth 5 points (Candy lab is 20 points) and 2 points will be deducted from your grade for each day late.

Course Grading Based on Course Objectives

GRADING

Homework will be worth up to 25 points each as follows:

80% or more correct = 25 points,	70% or more correct = 20 points,
60% or more correct = 15 points,	50% or more correct = 10 points,
40% or more correct = 5 points,	Less than 40% correct = 0 points

To receive a passing grade of “C” or better, you must have 406 points or more based on:

Homework /labs	130 points
Exams	300 points
<u>Final</u>	<u>150 points</u>
Total	580 points

Breakdown: 522 & up = A, 464 - 521 = B, 406 - 463 = C, 348 - 405 = D, below 348 = F.

Attendance, class participation and a subjective instructor’s interpretation of work may be used in assigning a final grade to borderline cases.

Incomplete Grade

To receive a final grade of incomplete, you must be passing the class and be unable to take the final exam.

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. **DO NOT TEXT. Texting during class is disruptive to your learning and students around you.**

- 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.
- Please be courteous of others: Try to be on time to class and avoid talking during lectures.

Academic Honesty

- Plagiarism is to take and present 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 correctly 'cite a source', 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, or assisting others in using materials, which 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) use of 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 Learning Services (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 learning 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 help 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

Week 1: 1/22	Introduction, Chapter 1 Vocabulary, 2.2
Week 2: 1/29	2.3 – 2.5, 3.2 – 3.3
Week 3: 2/5	3.4, Review (need calculator by now)
Week 4: 2/12	Exam 1, 4.2 – 4.3
Week 5: 2/19	4.4 – 4.6, 5.2
Week 6: 2/26	5.3 – 5.4, Review
Week 7: 3/5	Exam 2, 6.2 – 6.3
Week 8: 3/12	6.4 – 6.6, 7.2
Week 9: 3/19	7.2 – 7.4
Week 10: 3/26	8.2 – 8.3, Review
Week 11: 4/2	Exam 3, 8.4 – 8.5
Week 12: 4/9	9.2 – 9.4
Week 13: 4/16	11.2 – 11.3 / Review
Week 14: 4/23	HOLIDAY
Week 15: 4/30	Exam 4, 10.2 – 10.3
Week 16: 5/7	Review for Final
Week 17: 5/14	FINAL EXAM