## Basic Course Information

| Semester | Winter 2016 | Instructor Name | Dr. Alejandro Cozzani |
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| Course Title \& \# | Math 119 | Email | alex.cozzani@imperial.edu |
| CRN \# | $\mathbf{1 5 0 5 2}$ | Webpage (optional) | Refer to Blackboard |
| Room | $\mathbf{2 7 2 3}$ | Office | $\mathbf{2 7 6 7}$ |
| Class Dates | January 05-February 05 <br> Holiday: Monday January 18 <br> Drop date: January 28, 2016 | Office Hours | None |
| Class Days | Tuesday-Friday (week \# 1) <br> Monday-Friday (week \# 2-5) | Office Phone \# | 760-355-5720 |
| Class Times <br> Units | 5:30-8:20 PM. <br> U.0 | Office contact if <br> student will be out <br> or emergency | Silvia Murray 760-355-6201 or <br> Ofelia Duarte 760-355-6155 |

## Course Description

Math 119-Introductory Statistics with Applications is aimed to provide a clear understanding of basic statistical concepts and techniques and to present well-organized procedures for applying them in the different fields of study.

## 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 topic.
2 Apply their knowledge of basic descriptive statistics.
3 Apply knowledge of statistical inferences to conduct formal significance tests concerning single populations.
4 Apply techniques of linear modeling to explore the relationship between two numerical variables.

## Course Objectives

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

## Textbooks \& Other Resources or Links

Elementary Statistics by Mario Triola, second CA edition, ISBN: 978-1-256-93644-2.

## Course Requirements and Instructional Methods

1. Exams or Tests: There will be $\underline{3}$ tests and there will be no makeup exams given. Zeros will be given for all missed tests. Please refer to calendar for dates.
2. Final Exam: The common final will be given during the last day of winter session. A score of $\mathbf{0}$ will be given if the final is missed. Please refer to calendar for dates.
3. Homework: The purpose of homework is to provide students with sufficient practice to master all topics and to do well on tests and the final exam.
a. OPTION 1: Homework can done using MathXL (all assignments are listed online as well as the deadline which is $02 / 02 / 2016$ ). It is student's responsibility to complete them on or before the deadline regardless whether he/she is absent. Please keep in mind that after the deadline you will not be able to work on that specific assignment because the program will lock it automatically. If your overall score is $80 \%$ or higher you will get full credit, otherwise your grade will be your overall percentage translated to points. For example: if you score $80 \%=100$ points, if you score $72 \%=72$ points.
MathXL Code: XL25-L12K-8020-8DI2.
b. OPTION 2: You will be answering (any) 10 problems from the Review Exercises and (any) $\underline{5}$ problems from the Cumulative Review Exercises at the end of each chapter. Deadlines as follows:
$>$ Chapters 1-3 due on or before exam \# 1 (NO EXCEPTIONS!),
> Chapters 4-6 due on or before exam \# 2 (NO EXCEPTIONS!),
$>$ Chapters 7-9 due on or before February 02, 2016 (NO EXCEPTIONS!).

* Since answers are provided at the end of the book, you can double-check your work BUT cheating does apply if you copy the solution to the problems from the solution manual (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).

4. There will be no extra credit. Students must learn the material to pass this course.
5. It is up most important that students review the material to do well on exams. Students are encouraged to form study groups to meet regularly to keep up with assignments and to study for tests.
6. Students will not be allowed to make up an exam or final exam unless you have a powerful reason to miss a test (e.g. hospitalization, jury duty, and bring the corresponding paperwork).

## Course Grading Based on Course Objectives

The student's grade will depend on the following areas (not on total points):

| Semester Tests: | $\mathbf{6 0 \%} \quad$ There will be 3 tests and there will be no makeup exams given. Zeros will be <br> given for all missed tests. |
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| Final Exam: | $\mathbf{2 5 \%}$ The final will be given the last day of winter session. A score of $\mathbf{0}$ will be given if <br> the final is missed. <br> Homework <br> $\mathbf{1 5 \%}$ Done on MathXL. <br> TOTAL$\quad \mathbf{1 0 0 \%}$ |

## Imperial Valley College Course Syllabus - Math 119 Fall 2016

All grades are calculated by using the standard scale of:

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A=100-90 \% \quad B=89-80 \% \quad C=79-70 \% \quad D=69-60 \% \quad F=59 \% \text { and below. }
$$

## Blackboard displays two grades: the weighted and the total. Your grade is the weighted one, so please keep it in mind.

## 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.
- Calculators: scientific calculators/graphing calculators can be used during class time and exams. NO phones or tablets as a substitute for calculators during exams.
- 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 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

- 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.


## Imperial Valley College Course Syllabus - Math 119 Fall 2016

- 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 760-3556313 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 \# | CORE CONTENT | ASSIGNMENTS - TESTS |
| :---: | :--- | :--- |
| 1-January 5 | Course Syllabus/Introductions <br> Introduction to Statistics <br> Summarizing and graphing data <br> Statistics for describing, exploring, and <br> comparing data | Chapter 1 <br> Chapter 2 |
| 2-January 11 | Chapter 3 \# 1 <br> Probability <br> Discrete probability distributions |  |
| 3- January 18 | Normal probability distributions <br> $>$ Test \# 2 <br> Estimates and sample sizes <br> Hypothesis testing | Chapter 4 <br> Chapter 5 |
| Chapter 6 1-2-3 <br> $>$ Chapters 4-5-6 |  |  |
| Chapter 7 |  |  |
| Chapter 8 |  |  |


|  | Correlation and regression | Chapter 10 |
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| 5-February 01 | Chi-square and analysis of variance <br> Review all chapters for final exam <br> Final Exam-All Chapters | Chapter 11 |

