Basic Course Information

Semester:	**Fall 2016**	Instructor Name:	Jill Nelipovich
Course Title & #:	**Math 119**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**10125**	Webpage (optional):	
Classroom:	**2728**	Office #:	**2728**
Class Dates:	**8/15/16 – 12/9/16**	Office Hours:	**Mon/Wed: 10:15 – 11:45 a.m.** **Wed: 9:45 – 10:15 p.m.** **Th: 7:30 – 8:00 a.m.** **Fri: 11:15 – 11:45 a.m.**
Class Days:	**W**	Office Phone #:	**760 – 355 - 6297**
Class Times:	**5:30 – 9:45 p.m.**	Emergency Contact:	**Ofelia Duarte – Staff Sec II** **760 – 355 - 6155**
Units:	**4**		

Course Description

The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and supervised use and practice in the application of technology for statistical analysis including the production of graphics, finding confidence intervals, test statistics, and regression lines, as well as the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. (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:
Distinguish among different scales of measurement and their implications.

1. Interpret data displayed in tables and graphically.
2. Apply concepts of sample space and probability.
3. Calculate measures of central tendency and variation for a given data set.
4. Identify the standard methods of obtaining data and identify advantages and disadvantages of each.
5. Calculate the mean and variance of a discrete distribution.
6. Calculate probabilities using normal and t-distributions.
7. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem.
8. Construct and interpret confidence intervals.
9. Determine and interpret levels of statistical significance including p-values.
10. Interpret the output of a technology-based statistical analysis.
11. Identify the basic concept of hypothesis testing including Type I and II errors.
12. Formulate hypothesis tests involving samples from one and two populations.
13. Select the appropriate technique for testing a hypothesis and interpret the result.
14. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics.
15. Make use of Chi-square distributions to analyze counts.
16. Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life science, health science, and education.

Textbooks & Other Resources or Links

Recommended: Triola, Mario 2013. *Elementary Statistics, CA Edition* 2nd. Pearson ISBN: 1256936448.

Graphing Calculator (May download on a computer for free, rent from MathLab ($10.00 per semester)

Being a Successful Student…

- Keep up with the material posted on canvas.
- Form groups
- Look at Canvas regularly – homework will be posted in Canvas.

Course Requirements and Instructional Methods

- Instructional method is lecture. There will be some required videos to watch between courses.
    - Videos will be posted in Canvas
- Homework will be posted in Canvas in Files under Homework; some homework will be done online, some homework you will be asked to print and turn in.
- Project
- 2 Exams
- Weekly Quizzes (for the most part)
- Final Exam – cumulative

Course Grading Based on Course Objectives

Exams – 2	**50%**		**A:** $90\% \leq x \leq 100\%$
Final Exam	**30%**		**B:** $80\% \leq x < 90\%$
Project	**10%**		**C:** $70\% \leq x < 80\%$
Homework	**5%**		**D:** $60\% \leq x < 70\%$
Quizzes	**5%**		**F:** $x < 60\%$

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

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.
- 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 by the instructor.
- 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.

Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- 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 plagiarizing 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 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 Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Blackboard Support Site.** The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- **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. Please contact them 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.

- **Student Health Center**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.
- **Mental Health Counseling Services**. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC Mental Health Counseling Services at 760-355-6196 in Room 2109 for more information.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

Anticipated Class Schedule/Calendar

Date	Topics Covered
8/17/16	Introduction to Statistics; Exploring and Understanding Data
8/24/16	Exploring and Understanding Data; Gathering Data/Experimental Design
8/31/16	Qualitative and Quantitative; Describe distributions numerically
9/7	Exploring and Understanding Data – the Standard Deviation and the normal model Assign Project
8/14/16	Exploring Relationships between variables
9/21/16	Review/Exam 1
9/28	Randomness and Probability
10/5	Randomness and Probability; Binomial Model
10/12	Sampling Distribution Models
10/19	Confidence Intervals for Proportions & Hypothesis Testing for Proportions
10/26	Confidence Intervals for Means & Hypothesis Testing for Means
11/02	More Statistical Tests
11/09	Review/Exam 2
11/16	Inferences about means
11/23	Holiday
11/30	Inferences about means; Project Due
12/07	Final exam