Basic Course Information

Semester:	**Winter 2020**	Instructor Name:	**Allyn Leon**
Course Title & #:	**Elementary Statistics, Math 119**	Email:	**allyn.leon@imperial.edu**
CRN #:	**15298**	Webpage (optional):	**http://imperial.instructure.com**
Classroom:	**212**	Office #:	**2760.2**
Class Dates:	**01/06/2020 - 02/06/2020**	Office Hours:	**N/A**
Class Days:	**Monday through Friday**	Office Phone #:	**760-355-6523**
Class Times:	**12:30 pm to 3:35 pm**	Midterm:	**Friday 01/24**
Units:	**4**	Final:	**Thursday 2/06**

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)

Course Prerequisite(s) and/or Corequisite(s)

MATH 091 or MATH 090 with a grade of C or better, or appropriate placement.

Student Learning Outcomes

By the end of this course, given a problem or a set of problems, the student will demonstrate problem solving strategies by identifying an appropriate method to solve a problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation.

Important Dates

Last day to add the class: **Wednesday 01/08/2020**
Last day to withdraw from the class with a "W": **Wednesday 01/29/2020**
Midterm: **Friday 01/24**
Final: **Thursday 2/06**

Course Objectives

Through various activities and assessments:

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.

Textbooks & Other Resources or Links

Textbook: Introductory Statistics by Illowsky and Dean, OpenStax Publisher.

Online: You can view the book online at this url
http://cnx.org/contents/MBiUQmmY@18.11:2T34_25K@11/Introduction

Download PDF: The book will also be available as a PDF download (in Canvas).

Calculator: A basic calculator, like a TI-30 (costs around $10) is recommended, or you can go with a graphing calculator, like the TI-83 or TI-84; it really depends on what other math or science classes you plan on taking later on. You NEED a calculator of some sort to do the work on the tests. You will **NOT** be allowed to use Cell Phone calculators on the Midterm or the Final.

Course Requirements and Instructional Methods

Practice: There will be ***exercises*** assigned from every section that we cover **FOR PRACTICE ONLY**. You will not turn these in. These practice exercises can be completed out of the textbook.

Quizzes: There will be 10 to 13 quizzes to be completed in Class. These quizzes will have between 2 and 5 questions and will usually cover one chapter, although some of the later quizzes may cover more than one chapter. The top 10 quizzes will count towards your overall grade.

Technology Activities: There will be 4 assignments involving the use of technology (using Google Sheets or Microsoft Excel). Think of these like mini projects. We will go to the Math Lab on certain days to work on these assignments. More information will be provided through Canvas.

Tests: Test 1 and Test 3 will take place at the end of short clusters of topics. These tests will include between 10 and 20 questions and take place in class.

Test 2 is the Midterm and Test 4 is the Final. These tests are worth more points. The midterm and final will have between 10 and 20 questions, part multiple choice and part free response. You will be allowed to use one sheet of notes, **HANDWRITTEN**, on both sides, and you should definitely bring a calculator. **There will be NO make-up exams**.

Missed Exams: If you miss **ANY** exam, it will be recorded as a zero, and **the final exam percentage** will be used to replace that score at the end of the semester. 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

Your grade will be calculated based on the following items:

10 Quizzes at 20 points each (take 10 to 13, count top 10)	200 points	~20%
4 Technology Activities @ 25 points each	100 points	~10%
Test 1 and Test 3 @ 50 points each	100 points	~10%
Test 2 (Midterm) and Test 4 (Final) @ 300 points each	600 points	~60%
Total	*1000 points*	*100%*

Your final grade will be based on the following points and percentages:

90% to 100%	900-1000 points	A
80% to 89%	800-899 points	B
70% to 79%	700-799 points	C
60% to 69%	600-699 points	D
Below 60%	Below 600 points	F

The **Canvas Gradebook** is where you want to go to check your grades and progress. You can do this at any time to get an idea of how you are doing in the class.

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, only students enrolled in the class may attend; children are not allowed.

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 importance 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.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- 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 counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information..

Veteran's Center

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

Student Equity Program

- The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.

- The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

Extended Opportunity Program and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.
Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, lourdes.mercado@imperial.edu.

EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, alexis.ayala@imperial.edu.

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

Week #	Dates	Readings & Assignments	Test Dates
1	01/06	Introduction to the class	
	01/07	Sections 1.1, 1.2, 1.3, & 1.4	**Quiz 0**
	01/08	Sections 1.5, 2.1, 2.2	**Quiz 1**
	01/09	Sections 2.3, 2.4, & 2.5	**Quiz 2**
	01/10	Sections 2.6, 2.7, & 2.8	**Quiz 3**
2	01/13	**Review/Test 1**	**Test 1 (Chapters 1-2)**
	01/14	Section 3.1	**Tech Activity 1**
	01/15	Sections 3.2, 3.3, & 3.4	**Quiz 4**
	01/16	Sections 3.5, Counting Techniques, & 4.1	**Quiz 5**
	01/17	Section 4.2	**Quiz 6**
3	01/20	**No Class**	
	01/21	Sections 4.3, 5.1, & 5.2	**Tech Activity 2**
	01/22	Sections 6.1, 6.2, & 7.1	**Quiz 7**
	01/23	Sections 8.1, 8.2, & 8.3	**Quiz 8**
	01/24	**Review/Test 2**	**Test 2 (Ch 1-7) on Friday 1/24**
4	01/27	Sections 9.1, 9.3, & 9.4	**Quiz 9**
	01/28	Sections 9.5, & 9.6	**Tech Activity 3**
	01/29	Section 10.1	**Quiz 10**
	01/30	Sections 10.3 & 10.4	**Quiz 11**
	01/31	**Review/Test 3**	**Test 3 (Chapters 8-10)**
5	02/03	Sections 12.1, 12.2, & 12.3	**Quiz 12**
	02/04	Sections 12.4, 12.5, & 13.1	**Tech Activity 4**
	02/05	Review for Final	**Review Session on Wednesday 2/05**
	02/06	**Test 4/Final Exam**	**Test 4 (Ch 1-13) on Thursday 2/06**