Thank you for choosing IVC! We are so happy to join you in your educational journey.

Basic Course Information

Semester:	Fall 2020	Instructor Name:	Allyn Leon
Course Title & #:	Elementary Statistics, Math 119	Email:	allyn.leon@imperial.edu
CRN #:	11303, 11651, 11680	Webpage (optional):	http://imperial.instructure.com
Classroom:	N/A	Office #:	2760.2
Class Dates:	08/17/2020 - 12/12/2020	Office Hours:	Mon - Thurs from 10 am to 11 am
Class Days:	N/A	Office Phone #:	760-355-6523
Class Times:	N/A	Emergency Contact:	
Units:	4		

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)

Appropriate placement as defined by AB705 or, MATH 098 or MATH 091 with a grade of "C" or better.

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: **Thursday 09/10/2020** Last day to withdraw from the class with a "W": **Saturday 11/07/2020** <u>Orientation Video: Syllabus and Course Information</u> <u>Orientation Video: Canvas</u> <u>Orientation Video: Textbook</u>

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.

Course Requirements and Instructional Methods

<u>Practice:</u> You are welcome to try exercises at the end of each section of the online textbook to practice concepts learned. These are not for you to turn in and would be **FOR PRACTICE ONLY**. There will also be exercises for many concepts available in Khan Academy. Similarly, these are not to turn in and are also **FOR PRACTICE ONLY**.

<u>Online Quizzes:</u> There will be up to 13 or 14 quizzes to be completed online in Canvas. These quizzes will have between 5 and 20 questions and will usually cover one chapter. The quizzes will be worth 10 points each and have specific due dates (Check Canvas for these); make sure you finish the quizzes on time! The top 10 quizzes will count towards your overall grade. The quizzes will account for 100 points total, or 20% of your overall grade.

<u>Technology for Analyzing Data</u>: There will be **one project** that may involve the use of technology (such as Google Sheets, Minitab, StatDisk, or Microsoft Excel). More information will be provided through Canvas. The project will be worth 100 points, or 20% of your overall grade.

<u>Tests:</u> There will be a midterm and final to be taken online within Canvas. The midterm covers material from the first half of the course and is worth 100 points or 20% of your overall grade. The final covers material from throughout the whole course and is worth 200 points or 40% of your overall grade.

In addition to completing the exam online within Canvas, you will also need to upload a picture (or pictures) of your written work for any problems that require steps right after submitting the test. This is to make sure that you are doing the work required for each problem and also to help with partial credit if you do not get the problem completely correct.

Please see the tentative schedule for the dates. There will be **no make-up exams**. If you miss the midterm, the final exam score will be used in its place. You can check your grades anytime in Canvas.

<u>Out of Class Assignments</u>: 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 <u>and</u> two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

What if I need to borrow technology or access to WIFI?

- 1. To request a loaner laptop, MYFI device, or other electronic device, please submit your request here: <u>https://imperial.edu/students/student-equity-and-achievement/</u>
- 2. If you'd like access the WIFI at the IVC campus, you can park in parking lots "I & J". Students must log into the IVC student WIFI by using their IVC email and password. The parking lots will be open Monday through Friday from 8:00 a.m. to 7:00 p.m.

Guidelines for using parking WIFI:

- -Park in every other space (empty space BETWEEN vehicles)
- -Must have facemask available
- -For best reception park near buildings
- -Only park at marked student spaces
- -Only owners of a valid disabled placard may use disabled parking spaces

-Only members of the same household in each vehicle

-Occupants **<u>MUST</u>** remain in vehicles

-Restrooms and other on-campus services <u>not</u> available

-College campus safety will monitor the parking lot

-Student code of conduct and all other parking guidelines are in effect

-Please do not leave any trash behind

-No parking permit required

If you have any questions about using parking WIFI, please call Student Affairs at 760- 355-6455.

Course Grading Based on Course Objectives				
Your grade will be calculated based on the following items:				
10 Quizzes @ 10 points each (count top 10)	100 points	~20%		
Project @ 100 points	100 points	~20%		
Midterm @ 100 points	100 points	~20%		
Final @ 200 points	200 points	~40%		
Total	500 points	100%		

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

90% to 100%	450-500 points	А
80% to 89%	400-449 points	В
70% to 79%	350-399 points	С
60% to 69%	300-349 points	D
Below 60%	Below 300 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.
- Attendance in an online class is more than just logging in
 - o You will need to make sure that you log in and check announcements regularly
 - o There are weekly readings and assignments that need to be done in a timely manner
 - o There will be exams completed online in Canvas as well
 - o Quiz 0, based on the syllabus, counts as an attendance check for the first week
 - o Quiz 0 is due by 11:59 pm on Wednesday, 08/26/2020
 - o If you do not complete Quiz 0 on time, you will be dropped from the class

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 Services for Students

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.

How do I access services now that we are mostly online?

- CANVAS LMS. Canvas is Imperial Valley College's 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.
- <u>Learning Services</u>. In order to accommodate students and maximize student success during the COVID-19 Pandemic, all tutoring support is being provided through one Zoom link (<u>IVC online Tutoring</u>). When campus

is open again, there are several learning labs to assist students. Whether you need support using computers, or you need a tutor, please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading, Writing & Language Labs</u>; and the <u>Study Skills Center</u>.

- <u>Library Services</u>. Visit the Spencer Library's page on the IVC website for a wealth of valuable resources and online access to databases, e-books and more. Contact us so we can help you with instructional and research development skills (for those conducting research and writing academic papers). When campus re-opens, students also have access to tutoring services in the Study Skills Center as well as private study rooms for small study groups. There is more to our library than just books!
- <u>Career Services Center</u>. The Career Services Center is dedicated to serve all IVC students and Alumni. Services include Career Assessments, Resume and Cover Letter Assistance, Interview Preparation, Internship Opportunities and Job Placement.
- <u>Child Development Center</u>. The Preschool and Infant/Toddler Centers are on-campus demonstration lab programs that meet the educational, research, and service needs of the institution and community at large. The Preschool program (children three to five years of age) and the Infant/Toddler program (newborn to three years of age) is in buildings 2200 and 2300. Service is available to families who meet the California Department of Education qualifications for enrollment. <u>The centers are open during COVID</u> from Monday-Friday 7:15-5:30. Breakfast, lunch and snack are provided through the California Adult and Child Food Program. Location: Buildings 2200 and 2300. Phone: (760) 355-6528 or (760) 355-6232. Application: <u>https://forms.imperial.edu/view.php?id=150958</u>

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. When campus is open, the DSP&S office is 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, but you must make an appointment. In addition, Pioneers Memorial Healthcare District provides basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128, or when campus reopens, visit 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 for appointments, or when campus reopens visit Room 1536, for 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 in three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie. The Center also serves as a central hub that connects military/veteran students, as well as their families, to campus and community resources. The goal is to ensure a seamless transition from military to civilian life. When campus reopens, the Center is in Building 600 (Office 624), telephone 760-355-6141.

Extended Opportunity Program and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, book grants, transportation assistance, individualized counseling, tutoring, and community referrals to eligible students. Our

staff is available to assist and support students in navigating personal, psychological, academic, and/or career-related issues through empathy, cultural-competence, and a commitment to equity and social justice. Also under the umbrella of EOPS is the CARE (Cooperative Agency Resources for Education) Program, designed to serve single parents and assist with addressing 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 about the EOPS or CARE Programs please contact our Program Office 760.335-6407 and/or visit our Program website <u>www.imperial.edu/students/eops</u> for eligibility criteria and application procedures. We look forward to serving you! - EOPS/CARE Staff

Student Equity Program

The Student Equity & Achievement 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. SEA addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, LGBTQIA+, Veterans, foster youth, homelessness, and formerly incarcerated students. The SEA Program also houses IVC's Homeless Liaison, Foster Youth Liaison, Formerly Incarcerated Liaison, and Military Affiliated Liaison, who provide direct services and referrals to students in need. SEA strives 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 enrollment, education, degree and certificate completion, and the ability to transfer to a university. SEA also provides outreach at local Imperial County high schools to ensure graduating seniors are successfully matriculated into the college and have a strong support system. Please visit us online for assistance at

<u>https://imperial.edu/students/student-equity-and-achievement/</u> or call us at 760-355-6465 or when campus reopens, visit Building 401.

What if I cannot afford food, books, or need other help?

We have many resources that are available to you. Please tell us what you need by submitting your request(s) here: <u>https://imperial.edu/students/student-equity-and-achievement/</u>

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				
#	Week of	Readings & Assignments	Module	Tests/Quizzes
1	08/17	Optional Head Start		
		Introduction/Orientation	START HERE!	Quiz 0
2	08/24	Sections 1.1, 1.2, 1.3, 1.4, & 1.5	Module 1	Quiz 1
3	08/31	Sections 2.1, 2.2, 2.3, & 2.4	Module 2	Quiz 2
4	09/07	Sections 2.5, 2.6, 2.7, & 2.8	Module 3	Quiz 3
5	09/14	Sections 3.1, 3.2, & 3.3	Module 4	Quiz 4
		Sections 3.4, 3.5, Counting	Module 5	
6	09/21	Techniques, & 4.1	Module 6	Quiz 5
7	09/28	Sections 4.2,4.3, & 5.1	Module 6, 7	Quiz 6
8	10/05	Sections 5.2, 6.1, 6.2, 7.1	Module 7	Quiz 7
		Review for Midterm Exam		Midterm (Chapters) available online from
9	10/12	Midterm Exam		10/02 to 10/08
10	10/19	Sections 8.1 & 8.2	Module 8	
11	10/27	Sections 8.3, 9.1, 9.3, & 9.4	Module 8, 9	Quiz 8
12	11/02	Sections 9.5, 9.6, 10.1	Module 9, 10	Quiz 9
13	11/09	Sections 10.3, 10.4, 12.1, & 12.2	Module 10, 11	Quiz 10
14	11/16	Sections 12.3, 12.4, & 12.5	Module 11	Quiz 11
15	11/23	Thanksgiving Break		Thanksgiving Break
16	11/30	Sections 13.1	Module 12	Quiz 12
		Review for Final Exam		Final Exam (Chapters) available online from
17	12/07	Final Exam		12/04 to 12/10

QUIZ 0, BASED ON THE SYLLABUS, IS DUE BY THE END OF THE DAY, 11:59 PM, ON WEDNESDAY 08/26/2020. IF QUIZ 0 IS NOT COMPLETED BY THEN, YOU WILL BE DROPPED FROM THE CLASS.