![Imperial Valley College logo](IMPERIAL VALLEY COLLEGE)

Basic Course Information

Semester:	**Fall 2023**	Instructor Name:	**Oscar J. Hernandez**
Course Title & #:	**Elementary Statistics Math 119**	Email:	**Oscar.hernandez@imperial.edu**
CRN #:	**10817**	Webpage (optional):	**None**
Classroom:	**Zoom**	Office #:	**2766**
Class Dates:	**August 14 – December 8**	Office Hours (Zoom)	**MTWTR 9:00-10:00 am**
Class Days:	**Mondays and Wednesdays**	Office Phone #:	**760-355-5739**
Class Times:	10:15 am – 12:45 pm	Emergency Contact:	**Oscar.hernandez@imperial.edu**
Units:	4	Class Format:	Synchronous RTOL

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)

a) MATH 091 MATH 098 with a grade of C or better
   or appropriate placement.
b) RECOMMENDED PREPARATION: ENGL 101 or ENGL 111

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
Demonstrate problem-solving strategies by identifying an appropriate method to solve a given 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. This outcome will be assessed through selected exercises on exams throughout the semester. (ILO1, 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

Author(s): **Triola, Mario**. **Elementary Statistics Using Excel 7th Edition**

Textbook ISBN-13: 9780136937432

Using Mymathlab for homework

Registration for Mymathlab is August 14 – September 15, 2023
 We will be using Mymathlab component that has e-book, so no need to buy the actual book. Mymathlab **need to be purchased. Use canvas link for purchase and access. Or www.mymathlab.com**

 Course ID: hernandez80802

 We will be using Mymathlab component for assignments. Check Due Date on Assignments. Use Course ID: hernandez80802 to sign up in the course. Follow the steps in "How to Register on Mymathlab document posted on canvas shell for this course.

Note: you get 14 days of free access, so my expectation is you will be on Mymathlab from day 1 of the class. Your success in the class depends on you being ready from day one to study and keep up with the assignments, after the 14 days free trial you need to buy the access code to continue with your work, otherwise all your work is lost.

Course Requirements and Instructional Method Course Grading Based on Course Objectives

Assignments (Study Guides) are on Canvas, all quizzes, tests and final exam will be Online (Canvas), homework is done at Mymathlab, you have to do the Homework assignments only.
Check Due Dates

 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 (Western Association of Schools and Colleges) has adopted a similar requirement. Since this is a 4 units online class that means approximately 25 hours of studying, working on assignments and contributing to discussions on weekly basis.

PACE: This course will move rapidly. Because we only meet twice a week (questions,discussions), we must cover a lot of material during each class module. It is critical that you stay caught up, avoid falling behind, stay organized, ask questions, and get additional help whenever necessary.

A typical out of class assignment would be as follow:
1. Complete an assigned list of exercises on an online math homework program such as Mymathtlab. Homework for the course and study skills for the Support course
2. Read the tutorial (Power-points) and watch the sample videos (On Canvas).
3. Participate on Discussions by posting your comments and response to two peers

Grading Comments

Expected response times for grading are generally 1 week after due dates.

View grading comments by clicking on Grades in the course navigation menu and click on assignment comments (Links to an external site.) and rubric results (Links to an external site.). Questions about grading comments should be directed to me via the Canvas Inbox. There is a Comment feature within assignment submissions but those can sometimes get buried, so an Inbox message is best to make sure I see it and you receive a quick response

Course Grading based on Course objectives;

	Points
Four tests (100 points each) Online Canvas	400
Quizzes	50
Homework on Mymathlab	100
Final Exam	100

Total Points	**650**

After all of your scores have been totaled, final grades will be assigned as follow:

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
Below 60%	F

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification

Course Policies

The first day of class is of utmost importance. If, for some reason, you absolutely can't attend, please make sure you e-mail me.

- 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.

What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment
- Student submission of an exam
- Student participation in an instructor-led Zoom conference
- Documented student interaction with class postings, such as an interactive tutorial or computer-assisted instruction via modules

- A posting by the student showing the student's participation in an assignment created by the instructor
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters
- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

Logging onto Canvas alone is <u>NOT</u> adequate to demonstrate academic attendance by the student.

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 (!!!!)].

How am I expected to act in an Real time online "classroom" (especially Zoom)?
Attending a virtual meeting can be a challenge when there are many students on one conference call. Participating in such meetings may count as class attendance, but disruptive behavior may also result in you not being admitted to future meetings. Follow the tips below for best results:

- **Be RESPECTFUL**
  o Your written, verbal, and non-verbal communications should be respectful and focused on the learning topics of the class.
- **Find a QUIET LOCATION & SILENCE YOUR PHONE (if zooming)**
  o People walking around and pets barking can be a distraction.
- **EAT AT A DIFFERENT TIME.**
  o Crunching food or chugging drinks is distracting for others.

- o Synchronous zoom times are set in advance so reserve meals for outside class meetings.
- **ADJUST YOUR LIGHTING SO THAT OTHERS CAN SEE YOU**
  - o It is hard to see you in dim lighting so find a location with light.
  - o If your back is to a bright window, you will be what is called "backlit" and not only is it hard on the eyes (glare) but you look like a silhouette.
- **POSITION THE CAMERA SO THAT YOUR FACE AND EYES ARE SHOWING**
  - o If you are using the camera, show your face; it helps others see your non-verbal cues.
  - o You may be at home, but meeting in pajamas or shirtless is not appropriate so dress suitably. Comb your hair, clean your teeth, fix your clothes, etc. before your meeting time to show self-respect and respect for others.
- **Be READY TO LEARN AND PAY ATTENTION**
  - o Catch up on other emails or other work later.
  - o If you are Zooming, silence your phone and put it away.
  - o If you are in a room with a TV – turn it off.
- **USE YOUR MUTE BUTTON WHEN IN LOUD PLACES OR FOR DISTRACTIONS**
  - o Pets barking, children crying, sneezing, coughing, etc. can happen unexpectedly. It's best if you conference in a private space, but if you can't find a quiet place, when noises arise **MUTE** your laptop.
- **REMEMBER TO UNMUTE WHEN SPEAKING**
  - o Follow your instructor's directions about using the **"raise hand"** icon or chat function to be recognized and to speak, but make sure you have unmuted your device.
  - o Do not speak when someone else is speaking.
- **REMAIN FOCUSED AND PARTICIPATE IN THE MEETING**
  - o Especially when the camera is on YOU, we can all see your actions. Engage in the meeting. Look at the camera. Listen to instruction. Answer questions when asked.
  - o Do not use the Zoom meeting to meet with your peers or put on a "show" for them.
- **PAUSE YOUR VIDEO IF MOVING OR DOING SOMETHING DISTRACTING**

Emergencies happen. If you need to leave the room or get up and move about, stop your video.

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 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) using a commercial term paper service.

How do I show academic honesty and integrity in an online "classroom"?

- **KEEP YOUR PASSWORDS CONFIDENTIAL.**
  - o You have a unique password to access online software like Canvas. Never allow someone else to log-in to your account.
- **COMPLETE YOUR OWN COURSEWORK.**
  - o When you register for an online class and log-in to Canvas, you do so with the understanding that you will produce your own work, take your own exams, and will do so without the assistance of others (unless directed by the instructor).

Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment;
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment;
- Having someone else take an exam or quiz for you;
- Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);
- Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;
- Excessive revising or editing by others that substantially alters your final work;
- Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class);
- Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Tentative Date	Topic	Notes
August 14 - 28	Summarizing Data and Graphing Data 2.1 Frequency Distributions 2.2 Histograms 2.3 Graphs that Enlighten and Deceive 2.4 Scatterplots, Correlation, and Regression	Chapter 2
August 14 - 28	Statistics for Describing, Exploring and Comparing data 3.1 Measures of Center 3.2 Measures of Variation 3.3 Measures of Relative Standing and Boxplots	Chapter 3
August 30	**Quiz Chapters 2 and 3**	**Check time on Canvas**
August 30 and August 31	**Online Test #1** **Chapters 2 and 3**	**Check time on Canvas**
September 4 -25	Probability 4.1 Basics Concepts of Probability 4.2 Addition Rule and Multiplication Rule 4.3 Complements and Conditional Probability. 4.4 Counting	Chapter 4
September 4 -25	**Discrete Probability Distributions** 5.1 Probability Distributions 5.2 Binomial Probability Distributions 5.3 Poisson Probability Distributions	**Chapter 5**
September 27	**Quiz Chapters 4 and 5**	**Check time on Canvas**
September 27 and September 28	**Online Test # 2** **Chapters 4 and 5**	**Check time on Canvas**
October 2-16	Normal Probability Distributions 6.1 The Standard Normal Distribution 6.2 Real Applications of Normal Distributions 6.3 Sampling Distributions and Estimators 6.4 The Central Limit Theorem 6.5 Assessing Normality	Chapter 6

	6.6 Normal as Approximation to Binomial	
October 2-16	Estimates and Sample Sizes 7.1 Estimating a Population Proportion 7.2 Estimating a Population Mean 7.3 Estimating a Population Standard Deviation or Variance	Chapter 7
October 18	**Quiz Chapters 6 and 7**	**Check time on Canvas**
October 18 and October 19	**Online Test # 3** **Chapters 6 and 7**	**Check time on Canvas**
October 23-November 6	Hypothesis Testing 8.1 Basic of Hypothesis Testing 8.2 Testing a Claim about a Proportion 8.3 Testing a Claim about a Mean 8.4 Testing a Claim about a Standard Deviation or Variance	Chapter 8
October 23-November 6	Inferences from two samples 9.1 Two Proportions 9.2 Two Means: Independent Samples 9.3 Two Dependent Samples (Matched Pairs) 9.4 Two Variances or Two Standard Deviations	Chapter 9
November 8	**Quiz Chapters 8 and 9**	**Check time on Canvas**
November 8 and November 9	**Online Test # 4** **Test Chapter 8 and 9**	**Check Time on Canvas**
November 13-27	Correlation and Regression 10.1 Correlation 10.2 Regression	Chapter 10
November 13-27	Goodness of Fit and Contingency Tables 11.1 Goodness of Fit 11.2 Contingency Tables	
November 29	**Quiz Chapter 10**	**Check time on Canvas**
December 4 and December 5	**Final Exam Cumulative Chapters 2 -11**	**Check Time on Canvas**

Note: November 20-24 No classes Holiday - Thanksgivinng

Subject to change without prior notice