IMPERIAL VALLEY COLLEGE

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

Basic Course Information

Semester:	**Winter 2024**	Instructor Name:	**Mardjan Shokoufi**
Course Title & #:	***MATH 119 Elementary Statistics***	Email:	**mardjan.shokoufi@imperial.edu**
CRN #:	15058	Webpage	**None**
Classroom:	**None- Online**	Office #:	**2762**
Class Dates:	**Jan 2-Feb 2, 2024**	Office Hours:	**None during winter session, questions will be answered via email and through zoom appointments**
Class Days:	None- Online E-mail me if interested to meet so we can set up a meet time on zoom.	Office Phone #:	**(760)355-6401 NOTE: for winter session, I will not be physically in my office so please email me with any questions you have.**
Class Times:	**None- Online**	Emergency Contact:	**Division secretary: Ms. Silvia Murray silvia.murray@imperial.edu**
Units:	**4**	Class Format:	**Fully Online, Asynchronous**

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; Probability Theory, such as counting principles, conditional probability and the Poisson distribution. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. (C-ID MATH 110) (CSU/UC)

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

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

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. 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)

IMPERIAL VALLEY COLLEGE

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Distinguish among different scales of measurement and their implications.
2. Interpret data displayed in tables and graphically.
3. Apply concepts of sample space and probability.
4. Calculate measures of central tendency and variation for a given data set.
5. Identify the standard methods of obtaining data and identify advantages and disadvantages of each.
6. Calculate the mean and variance of a discrete distribution.
7. Calculate probabilities using normal and t-distributions.
8. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem.
9. Construct and interpret confidence intervals.
10. Determine and interpret levels of statistical significance including p-values.
11. Interpret the output of a technology-based statistical analysis.
12. Identify the basic concept of hypothesis testing including Type I and II errors.
13. Formulate hypothesis tests involving samples from one and two populations.
14. Select the appropriate technique for testing a hypothesis and interpret the result.
15. Use linear regression and ANOVA analysis for estimation and inference and interpret the associated statistics.
16. Make use of Chi-square distributions to analyze counts.
17. 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.
18. Apply concepts of probability theory, such as counting principles, conditional probability, and the Poisson distribution.

Textbooks & Other Resources or Links

You need to purchase 18 weeks access to mymathlab.

No need to purchase physical textbook as it is imbedded in the mymathlab.

Textbook: Elementary Statistics Using Excel by M. Triola, 7th edition, 2022; ISBN: 9780136961888

We will be using MyMathLab component that has the e-book, so no need to buy the physical book.
MyMathLab **needs to be purchased. Use information posted on canvas about how to register and to purchase access.** You need to purchase 18 weeks access to mymathlab
We will be using Mymathlab component for assignments, and some tests.

Follow the steps in "How to Register on Mymathlab" document posted on canvas shell for this course.
Note: you get 7 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.

Your first assignment is due on Thursday January 4th, and if no assignment is turned in, the student will be dropped per IVC policy for online classes.

Course Requirements and Instructional Methods

Material needed: computer (not a Chromebook or such as you cannot access Excel or XLSTAT), Mymathlab course, access to EXCEL and XLSTAT(see posted documents on how to access Excel and XLSTAt for free through IVC), scanner, or camera to upload your work, paper, pen, pencil, highlighter, stapler, scientific calculator (you may download a free calculator app from various sites)

Course setting:
We will cover chapters 1-12. The course is set as 8 parts (8 modules). See the attached calendar for all due dates and times.

This course is designed to have you learn facts while gaining an appreciation of the power of Statistics and getting ready for your future courses understanding of statistics. My responsibility is to do my best to be an effective guide, while you are responsible to make a commitment to learning and keeping up with the daily work. Remember mathematics is learned through active participation.

On a daily basis you will have to take notes based on lecture videos posted, read your e-book emphasizing on the formulas and examples stated in the book notes document on canvas. And work on your assignment on mymathlab and discussion on canvas.

On daily basis you need to:

- Use provided lectures and book to study the day's topics and take notes.
- Work on the assignments.
- Know the pre-requisite topics learned in previous courses such as finding common denominator and such or ask me or tutors for help.

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 16-week semester. WASC has adopted a similar requirement.
For this winter session class that means approximately 30 hours of studying, working on assignments and reviewing for the tests per week as this is a 5-week class.

EXCEL and XLSTAT

You need to have access to **Microsoft Excel and XLSTAT.**
You have various options to access Excel:

- **IVC's computer lab have Excel installed**
- **Your own computer may have Excel installed**
- **Login to your IVC email to access Excel and XLSTAT remotely via outlook** here is how: **https://www.youtube.com/watch?v=Nw_uLNRdHSI and https://www.youtube.com/watch?app=desktop&v=FF4S5slDbjo&feature=youtu.be**

Course Grading Based on Course Objectives

8 Homework sets on mymathlab* @ 25 points each	**175** (See the attached calendar for dates)
9 Discussions on canvas **@ 25 points each	**200** (See the attached calendar for dates)
7 EXCEL and/or XLSTAT projects @ 50 points each**	**300**(See the attached calendar for dates)
2 Tests @100 points each	**200** (See the attached calendar for dates)
Cumulative Final @ 125 points	**125** (See the attached calendar for date)
TOTAL	**1000**

*Each set would consist of 50-75 exercises, depending on the material. 1 HW will count as extra credit.

**1 discussion and 1 Excel project will count as extra credit.

Grading Scale: The standard grading scale will be used: 90%=A, 80%= B, 70%-C, 60%=D, less than 60% will result in the grade of F.

900-1000 points = A
800-899 points = B
700-799 points = C
600-699 points = D
0-599 points = F

Extra Credit: 1 HW, 1 Excel project, and 1 discussion will count as extra credit.

Course Policies

Class Rules:

1. Late HW for HW sets 1-7 will be accepted with a 10% deduction. The due date for late HWs is Wednesday Jan 31.
2. **No** make-up/Late test will be given.
3. No make-up/Late discussion is allowed.
4. No make-up/Late Excel project is allowed.
5. Have paper, notebook, pen, pencil, and highlighter, your fully charged computer ready during study time.
6. It is the student's responsibility to drop or officially withdraw from the class.
(See IVC class schedule for dates).
7. It is **your responsibility** to take notes and **be aware of deadlines and due dates times.**

- **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 IVC 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.

Academic Honesty including using 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.

- 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 IVC General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: plagiarism, copying or attempting to copy from others during an examination or on an assignment, communicating test information with another person during an examination, allowing others to do an assignment or portion of an assignment, using a commercial term paper service, Using AI to help you with assignments including tests.

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.

IMPERIAL VALLEY COLLEGE

Anticipated Class Schedule/Calendar

Module	Chapter	HW on MyMathLab Due at 10 am on	Discussion Due at 10 am on Canvas	Excel /XLSTATproject due at 11:59pm
1 Jan 2-5	1 and 2	**Jan 5**	Discussion 1 part 1 due on **Jan 4** Discussion 1 part 2 due on **Jan 5**	**Jan 5**
2 Jan 5-10	3	**Jan 10**	Discussion 2 due on **Jan 10**	**Jan 10**
3 Jan 10-16	4	**Jan 16**	Discussion 3 due on **Jan 16**	**Jan 16**
4 Jan 16-19	5	**Jan 19**	Discussion 4 due on **Jan 19**	**Jan 19**
5 Jan19-23	6	**Jan 23**	Discussion 5 due on **Jan 23**	**Jan 23**
6 Jan 23-26	7	**Jan 26**	Discussion 6 due on **Jan 26**	**Jan 26**
7 Jan 26-30	8	**Jan 30**	Discussion 7 due on **Jan 30**	**Jan 30**
8 Jan 30-Feb 2	9-12	**Feb 2**	Discussion 8 due on **Feb 2**	No project due

Tests Information:

Test	Date
Test 1 covers chapters 1-4	**Available from Jan 13 at 10 am- Jan 18 at 12 noon**
Test 2 covers chapters 5-7	**Available from Jan 24 at 10 am- Jan 28 at 12 noon**
Final Covers Chapters 1-12	**Available from Jan 30 at 10 am- Feb 2 at 12 noon**

*****Tentative, subject to change without prior notice*****

Zoom meeting etiquettes: ***Since we will be meeting online for any appointments times, then make sure you have a space free of distraction during our meeting times, have your computer charged or charging, have your notebook, pen, pencils, and calculator handy.***

1) **Be RESPECTFUL**
    a. Your written, verbal, and non-verbal communications should be respectful and focused on the learning topics of the class.
2) **Find a QUIET LOCATION & SILENCE YOUR PHONE (if zooming)**
    a. People walking around and pets barking can be a distraction.
3) **EAT AT A DIFFERENT TIME.**
    a. Crunching food or chugging drinks is distracting for others.
    b. Synchronous zoom times are set in advance so reserve meals for outside class meetings.
4) **ADJUST YOUR LIGHTING SO THAT OTHERS CAN SEE YOU**
    a. It is hard to see you in dim lighting so find a location with light.
    b. 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.
5) **POSITION THE CAMERA SO THAT YOUR FACE AND EYES ARE SHOWING**
    a. If you are using the camera, show your face; it helps others see your non-verbal cues.
    b. 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.
6) **Be READY TO LEARN AND PAY ATTENTION**
    a. Catch up on other emails or other work later.
    b. If you are Zooming, silence your phone and put it away.
    c. If you are in a room with a TV – turn it off.
7) **USE YOUR MUTE BUTTON WHEN IN LOUD PLACES OR FOR DISTRACTIONS**
    a. 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.
8) **REMEMBER TO UNMUTE WHEN SPEAKING**
    a. 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.
    b. Do not speak when someone else is speaking.
9) **REMAIN FOCUSED AND PARTICIPATE IN THE MEETING**
    a. Especially when the camera is on YOU, we can all see your actions. Engage in the meeting. Look at the camera. Listen to instructions. Answer questions when asked.
    b. Do not use the Zoom meeting to meet with your peers or put on a "show" for them.
10) **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.