IMPERIAL VALLEY COLLEGE

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

Basic Course Information

Semester:	**Summer 2025**	Instructor Name:	**Mardjan Shokoufi**
Course Title & #:	***MATH 119 Elementary Statistics***	Email:	**mardjan.shokoufi@imperial.edu**
CRN #:	30208	Webpage	**None**
Classroom:	**None- Online**	Office #:	**2762**
Class Dates:	**June 16-July 24, 2025**	Office Hours:	**I have no office hours during the summer session, but we can set up zoom meetings if you have a question. Zoom meeting ID is on the homepage of the canvas shell for the course**
Class Days:	None- Fully online class We can meet by appointment via zoom. E-mail me if you are interested in setting an appointment time.	Office Phone #:	**(760)355-6401 NOTE: for summer session, I will not be physically in my office, so it is best to email me.**
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)

Successful completion of Intermediate Algebra or appropriate placement as defined by AB705

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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)

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 interpreting 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. Do not buy a physical textbook.

The mymathlab registration handbook is in the syllabus section of canvas.

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 e-book, so no need to buy the actual book.
MyMathLab **needs to be purchased. Use information posted on canvas on how to register and to purchase access.**

We will be using Pearson 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 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 your readiness from day one to study and keep up with the assignments.

Your first assignment on Pearson Mymathlab is due on Thursday June 19 at noon.
All module 1 assignments need to be turned in on time, otherwise per IVC policy students have to be dropped.

Course Requirements and Instructional Methods

Material needed: PC computer, Mymathlab course, access to EXCEL and XLSTAT, scanner, or camera to upload your work, paper, pen, pencil, highlighter, stapler, scientific calculator (you may download a free calculator app from various sites)

Note: Full laptop or desktop computer is required. Chromebooks, tablets, phones, and iPads are incompatible with the XLSTAT software used for this course.
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 requiring 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 the formulas and examples stated in the book notes document on canvas. And work on your assignment on mymathlab and discussion on canvas.

On a daily basis you need to:

- Use provided lectures and the e-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 6 weeks class that means approximately 24 hours of studying, working on assignments and reviewing for the tests per week as this is a 6-week class.

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EXCEL and XLSTAT

You need to have access to **Microsoft Excel and XLSTAT**

You have various options to access Excel:

- **IVC's computer lab has Excel installed**
- **Your own computer may have Excel installed**
- **Login to your IVC email to access Excel remotely via outlook**
  here is how: **https://www.youtube.com/watch?v=gJ08yqWU5mQ**
- **XLSTAT is an extension of Excel that you need to access remotely or using one of IVC's computer labs.**
  Here is how to access it:
  https://www.youtube.com/watch?app=desktop&v=FF4S5slDbjo&feature=youtu.be

Here is the XLSTAT code to enter: (copy and paste when need it)

XLSTAT activation code:

TE4DHT-ZRRP2X-ZJ3XB0-1A9KFN-KVNMSV-6GBZ6S

Course Grading Based on Course Objectives

Student Video introduction	**10** (See the attached calendar for date)
Pronto Message	**20 (available 6/16-7/20)**
Course discussion participation	**20 (available 6/16-7/20)**
8 Classwork/Homework sets*@ 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 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	**1050**

*Each set would consist of 50-75 exercises, depending on the material.

One HW, one discussion and one Excel project will count as extra credit. **If you complete all assignments then one in each category of HW, Discussion and Excel project will count as extra credit.

Note: For discussion and Excel projects your first post (submission) will be graded only. So, make sure before you post you have looked at the file you are uploading and the answers you are posting. A meaningful reply to another student is required for full 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.

945-1050 points = A
840-944 points = B
735-839 points = C
630-734 points = D
0-629 points = F

Extra Credit: 1 HW, Excel project and 1 discussion will count as extra credit if all are turned in.

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Course Policies

Class Rules:

1. Late **assignmnets are only accepted for certain modules up to the specific deadline stated. See the schedule for more info.**
2. **No** make-up test will be given. If one test is missed the percentage of the final will replace that one missed test. If a student misses both tests, then only for one test the final percentage will be replaced and the other will be scored as zero.
3. There is **no make-up for the Final exam**.
5. Have paper, a 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 and times.**

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.

Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through ***DSPS***, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

Academic Honesty including using 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.

- **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 owned 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, 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.

Attendance Policy

- **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 modules may be considered to have excessive absences and may be dropped.**

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.

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Anticipated Class Schedule/Calendar

Module Chapter Dates	Assignments and Due Dates **Note:** The Pronto and Course discussion Participation assignments are open from **6/16-7/20**	Notes
	Student Orientation Video Due Wednesday 6/18 at 10 pm	
	Discussion 1 part 1 original post due on **Thursday 6/19 at noon**	If **all assignments**
Module 1	Discussion 1 part 1 reply to another student due **Friday 6/20 at noon**	are not turned in
Chapters 1 & 2	Discussion 1 part 2 original post due on **Monday 6/23 at noon**	**by due date**
June 16-24	Discussion 1 part 2 reply to another student due **Tuesday 6/24 at noon**	**and time**
	HW 1 due **Tuesday 6/24 at noon**	then student will
	Excel Project 1 due **Tuesday 6/24 at 10 pm**	be **dropped**
	Discussion 2 original post due on **Saturday 6/28 at noon**	
Module 2	Discussion 2 reply to another student due **Sunday 6/29 at noon**	No late
Chapter 3	HW 2 due **Sunday 6/29 at noon**	assignments
June 24-29	Excel Project 2 due **Sunday 6/29 at 10 pm**	are accepted
	Discussion 3 original post due on **Tuesday 7/1 at noon**	Late assignmnets
Module 3	Discussion 3 reply to another student due **Wednesday 7/2 at noon**	are accepted
Chapter 4	HW 3 due **Wednesday 7/2 at noon**	till Friday 7/11
June 29-July 2	Excel Project 3 due **Wednesday 7/2 at 10 pm**	at noon
	Test 1 is open from Tuesday 7/1 at 8 am till Saturday 7/5 at 10 pm	
	Discussion 4 original post due on **Monday 7/7 at noon**	Late assignmnets
Module 4	Discussion 4 reply to another student due **Tuesday 7/8 at noon**	are accepted
Chapter 5	HW 4 due **Tuesday 7/8 at noon**	till Friday 7/11
July 2-8	Excel Project 4 due **Tuesday 7/8 at 10 pm**	at noon
	Discussion 5 original post due on **Saturday 7/12 at noon**	Late assignmnets
Module 5	Discussion 5 reply to another student due **Sunday 7/13 at noon**	are accepted
Chapter 6	HW 5 due **Sunday 7/13 at noon**	till Friday 7/18
July 8-13	Excel Project 5 due **Sunday 7/13 at 10 pm**	at noon
	Discussion 6 original post due on **Tuesday 7/15 at noon**	Late assignmnets
Module 6	Discussion 6 reply to another student due **Wednesday 7/16 at noon**	are accepted
Chapter 7	HW 6 due **Wednesday 7/16 at noon**	till Friday 7/18
July 13-16	Excel Project 6 due **Wednesday 7/16 at 10 pm**	at noon
	Test 2 open from Tuesday 7/15 at 8 am till Saturday 7/19 at 10 pm	
	Discussion 7 original post due on **Sunday 7/20 at noon**	Late assignmnets
Module 7	Discussion 7 reply to another student due **Monday 7/21 at noon**	are accepted
Chapter 8	HW 7 due **Monday 7/21 at noon**	till Tuesday 7/22
July 16-21	Excel Project 7 due **Monday 7/21 at 10 pm**	at noon

	Discussion 8 original post due on **Wednesday 7/23 at noon**	
Module 8	Discussion 8 reply to another student due **Thursday 7/24 at noon**	No late
Chapters 9-12	HW 8 due **Thursday 7/24 at noon**	assignments
July 21-24	**Final opens from Sunday 7/20 at 8 am till Thursday 7/24 at noon**	are accepted

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

Zoom meeting etiquettes: ***Since we will be meeting online for some office hours, appointments, or optional class 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, brush 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.