

## Basic Course Information

Semester:	<b>Fall 2025</b>	Instructor Name:	<b>Zhong Wen Hu</b>
Course Title & #:	<b>STAT C1000: Introduction to Statistics</b>	Email:	<b>zhong.hu@imperial.edu</b>
CRN #:	<b>11325</b>	Webpage (optional):	
Classroom:	<b>2721</b>	Office #:	<b>2760.1</b>
Class Dates:	<b>8/11/2025 to 12/6/2025</b>	Office Hours:	<b>MW: 9:30 am to 10:10 am TR: 11:35 am to 12:55 pm</b>
Class Days:	<b>MW</b>	Office Phone #:	<b>760-355-6355</b>
Class Times:	<b>3:45pm to 6:15 pm</b>	Emergency Contact:	<b>Silvia Murray 760-355-6201</b>
Units:	<b>4</b>	Class Format/Modality:	<b>Face-to-face (in person)</b>

## Course Description

This course is an introduction to statistical thinking and processes, including methods and concepts for discovery and decision-making using data. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-squared, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Students apply methods and processes to applications using data from a broad range of disciplines. (Formerly MATH 119)(C-ID: MATH 110) (CSU, UC credit limited. See a counselor.)

Additional Description Information: The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. 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.

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

Placement as determined by the college's multiple measures assessment process or completion of a course taught at or above the level of intermediate algebra.

## 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.

## Course Objectives

Through various activities and assessments, students will be able to:

1. Assess how data were collected and recognize how data collection affects what conclusions can be drawn from the data.

2. Identify appropriate graphs and summary statistics for variables and relationships between them and correctly interpret information from graphs and summary statistics.
3. Describe and apply probability concepts and distributions.
4. Demonstrate an understanding of, and ability to use, basic ideas of statistical processes, including hypothesis tests and confidence interval estimation.
5. Identify appropriate statistical techniques and use technology-based statistical analysis to describe, interpret, and communicate results.
6. Evaluate ethical issues in statistical practice.

**ADDITIONAL Objective Information:**

7. Distinguish among different scales of measurement and their implications.
8. Calculate measures of central tendency and variation for a given data set.
9. Determine and interpret levels of statistical significance including p-values.
10. Identify the basic concept of hypothesis testing including Type I and II errors.
11. Formulate hypothesis tests involving samples from one and two populations.
12. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics.
13. Make use of Chi-square distributions to analyze counts.
14. 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.
15. Apply concepts of probability theory, such as counting principles, conditional probability and the Poisson distribution.

### **Textbooks & Other Resources or Links**

**You will need to access Microsoft excel (Excel is included for free with your student account).**

**The textbook is Elementary Statistics Using Excel 6th Edition by Triola, Mario  
Textbook ISBN-13: 9780134506623**

**Calculator: A TI-83 plus or TI-84 plus is recommended this course.**

### **Course Requirements and Instructional Methods**

#### **Homework**

Homework will be posted on Canvas. It is your responsibility to check the homework assignment even if you are absent.

**Homework will be due by the date of each test.**

#### **Quiz/Pop-quiz/Group Work**

A quiz or group work may be given at any time during any class period. It may not be announced. The number of quizzes or group work in the semester will be instructor's discretion. The purpose is to provide a feedback on the learning outcome. The lowest scores will be dropped.

## **Tests**

There will be three tests. The purpose of these tests is to check your understanding of the concepts covered in the course. Most of the questions on these tests will require showing a significant amount of work. A correct answer with insufficient work will receive partial credit or no credit.

\*Bring your own papers and pens/pencils on test days.

## **Final Exam**

At the end of the semester, a COMPREHENSIVE/CUMULATIVE Final Exam will be given. If you miss the final, it will be recorded as a zero.

## **Course Grading Based on Course Objectives**

### **Grading Policy**

(Pop) Quiz /Group Work	10%
Homework	10%
Tests	60%
Final Exam	20%

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Total	100%
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### **Grading scale for determining the final grade**

- A: 90%-100%
- B: 80%-89%
- C: 70%-79%
- D: 60%-69%
- F: 0%-59%

## **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.

## **Course Policies**

### **Classroom Behavior**

Updated 11/2024



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*Behavior should not interfere with the learning of others. Civil and respectful conduct towards fellow students and towards the instructor is expected. Inappropriate behavior will be documented and may be subjected to disciplinary action. I highly encourage you to participate during class and take notes.*

### **Cell phone Policy**

*Cell phone use (including texting and/or listening to music, videos, etc.) is not allowed and cell phones should be turned off or on silent mode during class time. If you need to take an important call during class, please leave the classroom without disrupting others. Cell phone use during quizzes and exams is prohibited and violations to this policy will be considered academic dishonesty. Using a cell phone or any other electronic device or any additional materials during quizzes or exams will result in a grade of 0 for that quiz/exam.*

### **Attendance and Email Communication**

*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. 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. If you happen to miss any class lectures, it is your responsibility to get caught up with the material you missed. All email communications should be done through IVC email or Canvas. No personal emails should be used and inquiries made using personal emails will not receive a response. You are expected to check your IVC email and Canvas regularly, several times a week. Announcements will be sent through Canvas. Please check Canvas several times a week!!*

### **Financial Aid**

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at [finaid@imperial.edu](mailto:finaid@imperial.edu).

### **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

Date or Week		Activity, Assignment, and/or Topic
Week 1	August 11 - 15	Course Syllabus Chapter 1: Introduction to Statistics
Week 2	August 18 - 22	Chapter 2: Exploring Data with Tables and Graphs
Week 3	August 25 – 29	Chapter 3: Describing, Exploring, and Comparing Data
Week 4	September 1-5	Chapter 10: Correlation and Regression
Week 5	September 8-12	Review and Test 1
Week 6	September 15-19	Chapter 4: Probability
Week 7	September 22-26	Chapter 5: Discrete Probability Distribution
Week 8	September 29-Oct. 3	Chapter 6: Normal Probability Distributions
Week 9	October 6-10	Chapter 7: Normal Probability Distributions
Week 10	October 13-17	Review and Test 2
Week 11	October 20-24	Chapter 8: Estimating Parameters and Determining Sample Sizes
Week 12	October 27-31	Chapter 9: Hypothesis Testing
Week 13	Noverber 3-7	Chapter 11: Inferences from Two Samples
Week 14	Noverber 10-14	Chapter 11: Inferences from Two Samples
Week 15	Noverber 17-21	Review and Test 3
Week 16	Noverber 24-28	No Classes (Campus Open)
Week 17 December 1-5		Review and Final Exam

\*\*\*Subject to change without prior notice\*\*\*