



STAT 95 – Elementary Statistics
Section 1

BASIC COURSE INFORMATION

Instructor: Maipeng Wei
Telephone: (408) (924-5628)
Office hours: Th 10:30-12:30 or by appointment
Office Location: DMH 230

Email: maipeng.wei@sjsu.edu
Classroom: DMH 355
Class Days/Time: MW 9:00AM - 10:15AM
GE/SJSU Studies Category: Area B4

Prerequisites

Satisfaction of the Math Enrollment Category M-I or M-II, or completion of a GE Area B4 Course with a grade of C- or Better

COURSE DESCRIPTION

This course is designed to provide an overview of elementary statistical procedures used by researchers in the behavioral and social sciences and to prepare students for more advanced statistical techniques presented in other courses.

COURSE FORMAT

This is an in-person course. We will meet in DMH 355 during our scheduled class days/times.

Technology Requirements / Equipment / Material

- Regular access to a computer and internet connection.

To access the Canvas site: go to <http://www.sjsu.edu/at/ec/canvas/> and click on “Log in to Canvas”

Username = *SJSU 9-digit ID* **Password** = *your current SJSU One password*

For additional information or help with logging in: [Canvas Student Tutorial](#) and [Various features of canvas](#)

COURSE GOALS AND STUDENT LEARNING OBJECTIVES

Upon successful completion of this course, you will be able to:

- 1 CLO1** – Use statistical methods to solve quantitative problems, including those presented in verbal form.
- 2 CLO2** – Demonstrate the ability to use mathematics and statistics to solve real-life problems.
- 3 CLO3** – Arrive at conclusions based on numerical and graphical data.

Goal 1. Knowledge Base of Statistics: Students will demonstrate familiarity with the major concepts in statistics.

Goal 2. Application of Statistical Concepts: Students will be able to solve mathematical problems including those presented in verbal form.

Goal 3. Critical Thinking Skills: Students will develop the ability to arrive at descriptive and inferential conclusions on the basis of mathematical data presented through such forms as statistics, tables, graphs, and computer outputs,

Goal 4. Values in Psychology: Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Learning Objective 1 (GELO1): Use mathematical methods to solve quantitative problems, including those presented in verbal form.

Learning Objective 2 (GELO2): Demonstrate the ability to use mathematics to solve real life problems.

Learning Objective 3 (GELO3): Arrive at conclusions based on numerical and graphical data.

Learning Objective 4 (Specific to Area B4): Use basic mathematical techniques for solving quantitative problems and elementary numerical calculation

Learning Objective 5 (Specific to Area B4): Understand organization, classification, and representation of quantitative data in various forms (e.g., tables, graphs, percentages, measures of central tendency, and spread)

Learning Objective 6 (Specific to Area B4): Apply mathematics to everyday life

Learning Objective 7 (Specific to Area B4): Apply mathematical concepts to statistical inference

REQUIRED TEXTBOOK

Fundamental Statistics for the Social and Behavioral Sciences by Howard T. Tokunaga

ISBN-13: 978-1506377483 ISBN-10: 1506377483 available through bookstore and Amazon.

Textbook is not an option; you will be using it for assignments, and you will need the appendices for the exams.

COURSE REQUIREMENTS AND ASSIGNMENTS

Assignments in this class will be grouped into the following categories:

Mini Assignments

These assignments are short, hence the name, and fulfill the minimum 500 words writing requirement for this class.

A mini assignment is composed of two parts.

In Part 1, you will complete a worksheet that includes several questions.

- Due dates are on canvas and the syllabus.
- Part 1 will be graded on a hybrid Pass/No Pass scale with scores of 0 – 3– 6.
 - 6= ALL WORK DONE (i.e., all questions are answered; most people get this)
 - 3 = ONE exercise is INCOMPLETE. (a few get this)
 - 0 = MORE THAN ONE EXERCISE IS INCOMPLETE with obviously poor effort. (one or two may get this)
- Typing your answers is preferred.
- Where work is done by hand use a camera phone to photograph work on a separate page and upload it to canvas
- You MUST provide the QUESTION FOLLOWED BY THE ANSWER in the sequence of the Mini Guide.
- You may work in groups of 2 or 3.

Part 2 will become available the following Monday evening after you submit Part 1. In Part 2, you'll check your work against the answer key and complete a brief self-assessment. The answer key will be available on Canvas. The self-assessment worksheet consists of 3-4 short questions. Part 2 is graded based on completion, with 2 points awarded for each self-assessment.

Quizzes

- Each quiz includes 5 questions.
- In class
- You may try multiple times.

Participation

Participate in class group discussions. We have 12 worksheets to complete and discuss in groups. I'll only give credit for 10 discussions, so you can miss two without penalty. For each discussion you attend, you'll earn 1.8 points.

Exams

- There will be three exams in total, including two midterms (in-class) and one final (in-class).
- The exams are open-book and open-notes.
- The exams are not cumulative, but the concepts build over time.
- The exams will require a calculator, Canvas, cheat sheet of formulas, and any notes you wish to include.
 - Do not assume because you have a cheat sheet that you will not need to study. The cheat sheet will help with remembering formulas, but it will not help you understand how to use the formulas.
- The exams will include multiple-choice and true/false questions
- The exercises (mini assignments) assigned each week will be a good guide for what concepts need to be understood.

There are extra problems at the end of each chapter with answers in the book for more practice!

Make-Up Exams

All students are expected to take exams on the dates indicated in the syllabus. No makeup exams will be given unless you've requested an extension that has been approved by the instructor (see Late Assignments and requesting extension). Please notify me either before or no later than 24 hours after the exam date and time and state that you could not attend and are requesting a make-up exam.

GRADING INFORMATION

Grades will be based on mini assignments (112 pts), quizzes (40 pts), participation (18 points), and three exams (120 pts).

Assignment categories	Total Points	%
Mini (14)	$8 \times 14 = 112$	38.6%
Quizzes (8)	$5 \times 8 = 40$	13.8%
Participation	$1.8 \times 10 = 18$	6.2%
Exam (3)	$40 \times 3 = 120$	41.4%
	290	100%

Letter grades will be assigned according to the table below:

<i>Grade</i>	<i>Percentage</i>
<i>A plus</i>	<i>96 to 100%</i>
<i>A</i>	<i>93 to 95%</i>
<i>A minus</i>	<i>90 to 92%</i>
<i>B plus</i>	<i>86 to 89 %</i>
<i>B</i>	<i>83 to 85%</i>
<i>B minus</i>	<i>80 to 82%</i>
<i>C plus</i>	<i>76 to 79%</i>
<i>C</i>	<i>73 to 75%</i>
<i>C minus</i>	<i>70 to 72%</i>
<i>D plus</i>	<i>66 to 69%</i>
<i>D</i>	<i>63 to 65%</i>
<i>D minus</i>	<i>60 to 62%</i>

Extra credits

Several extra credit opportunities will be offered throughout the semester. Should extra credit opportunities be extended, the total amount of extra credit points earned by a student cannot exceed 1 – 2 % of the total number of points available in the course.

Late Assignments and requesting extension

Assignments are due on the date indicated on the course schedule. If due dates are changed, the new due date will be announced in lecture and posted on Canvas in a timely fashion. If you encounter an unexpected emergency outside of your control (e.g., COVID infection, eviction from your home, daycare closure, etc.), please notify me in advance of the due date and request extension.

No extensions will be given except in cases of reasonable and documented academic reasons, emergencies, serious illness, or similar seriously disruptive events. If such a circumstance should arise, please contact me as early as possible and be ready to provide documentation. Consideration will also be given to students whose dependent children experience serious illness.

Students with reasonable excuses may submit missed assignments without point deductions. You may submit a late assignment without reasonable and documented reasons, but you will receive a 10%-point deduction.

The late work must be turned in within one week of the original due date, and no later than two weeks after the original due date.

CLASSROOM PROTOCOL

Regular attendance is necessary to do well in the course.

Although the course has an online resource, this resource is not a substitute for attending lectures.

Laptops

In-class laptop use should be restricted to course-related activities (e.g., taking notes). You will be asked to turn off your laptop if you are engaged in non-class activities.

Cellphones and other electronic devices

Please be certain to turn off or put in silent mode all cell phones, pagers, and any other devices that produce distraction prior to entering the classroom.

Late arrivals

If you must arrive late or leave early, please do so quietly and with a minimum of distraction.

Be respectful of others

Respect differing points of view offered by students. Independent discussions should not be happening when someone is addressing the class.

I expect you to come to class prepared

“Prepared” means you have completed the readings before class starts and written down any questions you had. Be prepared to take notes.

Communication

Use email!! Use office hours! Talk to me!!

Check the course Canvas site regularly.

If I become ill, I will inform you the night before that I will be absent. Please email me before class if you will not be in class. Please set your spam controls to accept my email address.

DIVERSITY, EQUITY, AND INCLUSION

I aim to provide an inclusive learning environment in which diverse backgrounds and perspectives are recognized, respected, and seen as a source of strength. It is my intent to present materials and activities

that are respectful of diversity with respect to gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions on how I can make this course more equitable and inclusive to all forms of diversity are encouraged and appreciated.

In accordance with SJSU policies, the Student Code of Conduct, and applicable state and federal laws, discrimination based on gender, gender identity, gender expression, race, nationality, ethnicity, religion, sexual orientation, or disability is prohibited in any form. All such policies and regulations apply to the online environment, just as in face-to-face instruction. I encourage students who have a disability or other condition necessitating accommodation to discuss your needs with me as soon as possible.

STUDENT RESOURCES

Now more than ever, I encourage you to take advantage of the following resources.

The [SJSU Learn Anywhere](https://www.sjsu.edu/learnanywhere/) site (<https://www.sjsu.edu/learnanywhere/>) has a number of helpful resources for learning in an online environment, including help with Zoom and Canvas, finding free or affordable internet and computer resources, FAQs, workshops, and more.

The [Academic Counseling Center for Excellence in Social Sciences](http://www.sjsu.edu/access/) (ACCESS) Success Center (<http://www.sjsu.edu/access/>) provides general education advising for undergraduate students majoring or intending to major in any of the departments in The College of Social Sciences, including Psychology.

[SJSU Peer Connections](https://peerconnections.sjsu.edu/) (<https://peerconnections.sjsu.edu/>) offers free mentoring, tutoring, and supplemental instruction services for students at SJSU. Peer Educators are students just like you; they understand the triumphs and challenges of being a student at SJSU.

[SJSU Counseling and Psychological Services](http://www.sjsu.edu/counseling/) (<http://www.sjsu.edu/counseling/>) invites all students to contact them for any support needed. To get connected, call (408) 924-5910 or email counseling.services@sjsu.edu.

[SJSU Cares](https://www.sjsu.edu/sjsucares/) (<https://www.sjsu.edu/sjsucares/>) provides resources and services for students facing a financial crisis, including trouble paying for food or housing, trouble paying bills (including medical), and housing and food insecurity.

UNIVERSITY POLICIES

Per [University Policy S16-9](https://www.sjsu.edu/senate/docs/S16-9.pdf) (<https://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g., learning assistance, counseling, and other resources) are listed on the ' [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) ' web page at: <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>

Academic integrity

Students should know that the University's [Academic Integrity Policy](#). Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development.

The [Student Conduct and Ethical Development](#) website is available here.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of an individual need, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the [Accessible Education Center \(AEC\)](#) to establish a record of their access.

STAT 95, Elementary Statistics, Fall 2024, Course Schedule

This is a tentative timeline. The schedule is subject to change with fair notice.

Changes will be announced in class and via Canvas Notifications

Week	Date	Day	Topics	Assignments
1	8/21	W	Welcome & Logistics Introduction	
2	8/26	M	Chapter 1 Types of Stats, Types of Data, Types of Variables Chapter 2. Tables & Figures, Frequency Distributions & Graphs	Mini #1 (by the end of Sunday)
	8/28	W		
3	9/2	M	<i>Labor day-No class</i>	Mini 1-self-assessment (by the end of Sunday) Mini 2 (by the end of Sunday)
	9/4	W	Chapter 2. Tables & Figures, Frequency Distributions & Graphs	
4	9/9	M	Chapter 3 Central tendency	Mini 2-self-assessment (by the end of Sunday) Mini 3 (by the end of Sunday)
	9/11	W		
5	9/16	M	Chapter 4 Variability	Mini 3-self-assessment (by the end of Sunday) Mini 4 (by the end of Sunday)
	9/18	W		
6	9/23	M	Chapter 5 Normal Distribution Review	Mini 4-self-assessment (by the end of Sunday) Mini 5 (by the end of Sunday)
	9/25	W		
7	9/30	M	Exam 1 on Monday	Mini 5-self-assessment (by the end of Sunday) Mini 6 (by the end of Sunday)
	10/2	W	Chapter 6. Probability and hypothesis testing	
8	10/7	M	Chapter 7 z-stats & t-Stat	Mini 6-self-assessment (by the end of Sunday) Start working on Mini 7a &7b
	10/9	W		
9	10/14	M	Chapter 7 z-stats & t-Stat CONT'D Chapter 8 Estimating the Mean of a Population	Mini 7a &7b (by the end of Sunday) Mini8 (by the end of Sunday)
	10/16	W		
10	10/21	M	Chapter 9 Independent t-Test & Dependent t- test	Mini 7a&7b-self-assessment (by the end of Sunday) Mini 8-self-assessment (by the end of Sunday) Start working on Mini 9
	10/23	W		
11	10/28	M	Chapter 10 Errors in Hypothesis Testing, Statistical Power, and Effect Size Review	Mini 9 (due by the end of Sunday) Mini 10 (due by the end of Sunday)
	10/30	W		
12	11/4	M	Exam 2	Mini 9 self-assessment (by the end of Sunday) Mini 10-self-assessment (by the end of Sunday)
	11/6	W	Chapter 11 One-way ANOVA	
13	11/11	M	Chapter 11 One-way ANOVA	Mini 11 (due by the end of Sunday)
	11/13	W	Chapter 11 One-way ANOVA	
14	11/18	M	Chapter 12 Two-Way ANOVA	Mini 11-self-assessment (by the end of Sunday) Mini 12(by the end of Sunday)
	11/20	W	Chapter 12 Two-way ANOVA	

Week	Date	Day	Topics	Assignments
15	11/25	M	TBA	
	11/27	W	<i>Non-Instructional Day – (NI) Thanksgiving Holiday</i>	
16	12/2	M	Chapter 13 Correlation	Mini 12-self-assessment (by the end of Sunday) Mini 13 (by the end of Sunday)
	12/4	W	Chapter 14 Linear Regression	
17	12/9	M	Review	Mini 13 self-assessment (by the end of Sunday)
Final Exam	12/17	Tu	Exam 3 (7:15-9:30 AM)	