SJSU SAN JOSÉ STATE UNIVERSITY

College of Social Sciences · Psychology

Elementary Statistics

STAT 95

Spring 2026 Section 04 In Person 3 Unit(s) 01/22/2026 to 05/11/2026 Modified 01/16/2026

Contact Information

Juan Pena Ph.D.

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Office: DMH 321

Office Hours

Tuesday
DMH 321

10:00am - 11:00am and from 1:30-2:30pm

or by appointment

Course Information

The content, schedule, and policies outlined in this syllabus are subject to change at the discretion of the instructor. Any modifications will be communicated to students in a timely manner, either through email, course announcements, or in-class updates. It is the student's responsibility to stay informed of any changes.

Tuesday and Thursdays
Engineering building 403

12pm- 1:15pm

Course Description and Requisites

Hypothesis testing and predictive techniques to facilitate decision-making; organization and classification of data, descriptive and inferential statistics, central tendency, variability, probability and sampling distributions, graphic representation, correlation and regression, chi-square, t-tests, and analysis of variance. Computer use in analysis and interpretation.

Satisfies 2. Mathematical Concepts and Quantitative Reasoning (Formerly Area B4).

Prerequisite(s): Math Enrollment Category M-I or M-II, or for Categories III or IV, completion of a GE Area 2 course with a grade of C- or better.
Grading: Letter Graded

Note(s): Intended for Psychology majors and minors as well as for programs in Behavioral Science, Child Development, Education, Health Science, Nursing, Nutritional Science, Social Science, and Social Work.

✱ Classroom Protocols

It is expected that students will come to class prepared and ready to ask questions. This means that students:
1. Will have read any assigned material and finished quizzes before class starts.
2. Will silence mobile devices and take phone calls outside of the classroom
3. Participate in in-class activities and discussions

Email etiquette and preferred contact

If you email me, please place the section of the course (e.g., STAT95-04, STAT95-06) in the Subject line.

For example, if I was a student that had a question about quiz 3, I'd place STAT95-06 - Quiz 3 in the Subject line.

Please feel free to refer to me as any of the following:

Professor Peña, Mr. Peña, Dr. Peña, Professor, Profe, Dr. Juan, Mr. Juan

Please practice using this in email or any in-person communication. If you aren't sure, ask.

Policy on Artificial Intelligence

Generative artificial intelligence tools—software that creates new text, images, computer code, audio,video, and other content—have become widely available. Well-known examples include ChatGPT for text and DALL•E for images. This policy governs all such tools, including those released during our semester together. You may use generative AI tools on assignments in this course, within the following limitations.

If you do use generative AI tools on writing assignments in this class, you must properly document and credit the tools themselves. Cite the tool you used, following the pattern for computer software given in the specified style guide. Additionally, please include a brief description of a few sentences (e.g., what did you ask, what did you do to check for accuracy of the information, what modifications did you make, how did it help you understand the material or assignments) on how you used the tool. Please include this information in an appendix.

If you choose to use generative AI tools, please remember that they are typically trained on limited datasets that may be out of date. Additionally, generative AI datasets are trained on pre-existing material, including copyrighted material; therefore, relying on a generative AI tool may result in plagiarism or copyright violations. Finally, keep in mind that the goal of generative AI tools is to produce content that seems to have been produced by a human, not to produce accurate or reliable content;therefore, relying on a generative AI tool may result in your submission of inaccurate content. It is your responsibility—not the tool's—to assure the quality, integrity, and accuracy of work you submit in any college course.

As specified elsewhere in the syllabus, this course may require electronic submission of written projects through the originality assessment service Turnitin. Turnitin will also attempt to detect AI-generated text. If you use generative AI tools to complete assignments in this course, in ways that I have not explicitly authorized, I will apply the Student Conduct Code (California Code 41301 Standards for Student Conduct) as appropriate to your specific case. In addition, you must be wary of unintentional plagiarism or fabrication of data. Depending on the specific circumstances, a first offense academic integrity violation related to misuse of generative AI could lead to a sanction fora violation of the Student Conduct Code. Please act with integrity, for the sake of both your personal character and your academic record.

This statement was generated with the help of the Generative AI syllabus statement tool (Seaver college)

Accommodations for Students with Disabilities

Presidential Directive 97-03 (under Accommodation for Students with Disabilities (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) requires that students with disabilities requesting accommodations register with the Accessible Education Center (AEC) to establish a record of their disability. AEC will contact the instructor with further details, if needed. If special arrangements are needed in cases of emergency or if the building must be evacuated, please make arrangements with the instructor.

Consent for Recording of Class and Public Sharing

The Recording & Sharing Class Material Policy S12-7 [pdf] requires students to obtain instructor's permission to record the course. The following criteria define expectations relating to recording a course.

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without approval. You may not publicly share or upload instructor generated material such as exam questions, lecture notes, or homework solutions without instructor consent. This

prohibition includes sharing information with third parties and on websites.

You must obtain the instructor's permission to make audio or video recordings in class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

Permission from the instructor, whether in writing or orally, may extend to either a single class or the entire semester.

In classes where active participation of students or guests may be on the recording, permission of those students or guests must be obtained as well.

Program Information

Welcome to this General Education course.

SJSU's General Education Program establishes a strong foundation of versatile skills, fosters curiosity about the world, promotes ethical judgment, and prepares students to engage and contribute responsibly and cooperatively in a multicultural, information-rich society. General education classes integrate areas of study and encourage progressively more complex and creative analysis, expression, and problem solving.

The General Education Program has three goals:

Goal 1: To develop students' core competencies for academic, personal, creative, and professional pursuits.
Goal 2: To enact the university's commitment to diversity, inclusion, and justice by ensuring that students have the knowledge and skills to serve and contribute to the well-being of local and global communities and the environment.
Goal 3: To offer students integrated, multidisciplinary, and innovative study in which they pose challenging questions, address complex issues, and develop cooperative and creative responses.

More information about the General Education Program Learning Outcomes (PLOs) can be found on the GE website (https://sjsu.edu/general-education/ge-requirements/overview/learning-outcomes.php).

Course Learning Outcomes (CLOs)

GE Area 2: Mathematical Concepts and Quantitative Reasoning

Mathematical Concepts and Quantitative Reasoning courses enable students to use numerical and graphical data in personal and professional judgments and in understanding and evaluating public issues. Completion of Area 2 with a grade of C- or better is a CSU graduation requirement.

Area 2 courses help students understand information requiring quantitative analysis and how to use and analyze quantitative arguments. Completion of Area 2 with a minimum grade of C- is a CSU graduation requirement.

GE Area 2 Learning Outcomes

Upon successful completion of an Area 2 course, students should be able to:

1. use mathematical methods to solve quantitative problems, including those presented in verbal form;
2. interpret and communicate quantitative information using language appropriate to the context and intended audience;
3. reason, model, draw conclusions, and make decisions based on numerical and graphical data; and
4. apply mathematical or quantitative reasoning concepts to solve real life problems.

Writing requirement

The minimum writing requirement for Area 2 courses is 500 words in a language and style appropriate to the discipline.

Course Materials

Statistics for People Who (Think They) Hate Statistics

Author: Neil Joseph Salkind & Bruce B. Frey
Edition: 8th
Year: 2025

To enhance your learning experience and provide affordable access to the right course materials, this course is part of an inclusive access model called First Day™. You may easily access the materials at a discounted price and benefit from single sign-on access with no codes required in Canvas.

Please note, **You should not** be prompted to purchase the materials via canvas or the publisher. This will result in double billing (and at a higher cost).

You will see the first day billing on your student account via the Bursar's Office shortly after 2/17/26. However any questions regarding the materials should be directed to your professor or Spartan Bookstore 408-924-1812.

You may choose to Opt-Out on the first day of class and **no later than 2/17/25**. You will see the course materials charge on your Bursar's student account unless you have opted out prior to the deadline.

For more information and FAQs go to customercare.bncollege.com.

Student Tutorial Videos

Accessing Your eTextbook: https://vimeo.com/304674236
Opting Out of First Day for your eTextbook: https://vimeo.com/304674616
Opting Out of First Day for your courseware: https://vimeo.com/304674959
Other Features on the Course Materials page: https://vimeo.com/304675344

Customer Care Contact Information
Customer Care is available 24/7 to help students with questions about accessing their course material, using their eTextbook, or opting-out or in to the First Day program.

- Link to Customer Care website: customercare.bncollege.com
  FAQs and Tutorial Videos for the First Day Program: https://tinyurl.com/firstdayfaq
- Open a ticket Online for the Customer Care team: https://tinyurl.com/customercarerequest
- Email the Customer Care team: bookstorecustomercare@bncollege.com
- Call the Customer Care team: 1-844-9-EBOOKS (1-844-932-6657)

Technology requirements

Here is a list of equipment/software you will need in order to be successful in the course.

In-class statistics exercises (labeled as "Colab activities" on the schedule) will be completed with a Google product called Colab. Colab is a free tool that requires no downloading or installing–it simply runs in your web browser. I'll teach you the basics of how to use Colab before we have our first workday. Note that **Colab *doesn't* work well on mobile phones and most tablets** (although Chromebooks are fine). You will thus need to bring a laptop to class on workdays. No problem if you don't own a laptop! You can borrow one for free from the university either via the library (https://library.sjsu.edu/student-computing-services/student-computing-services) or IT (https://www.sjsu.edu/learnanywhere/how-tos/access-hardware.php).

✔ Grading Information

A student's grade will be based on the total amount of points (500 possible points) they receive from exams (500 possible points),participation (Colab exercises, and in-class activities), and quizzes.

Below is a breakdown of the amount of points needed to earn the specified letter grade. Grading is based on points. Not percentage. Thus, a student who earns 449 points will earn a B+ and they will have an 89.80% for the course.

Minimum Grading: For students that COMPLETE assignments, quizzes, or exams ON TIME but score less than 50%, their scores will be changed to be at least 50%. For example, a student that scores 3/10 on a quiz but completes each item (does not skip questions) will obtain at least 5/10. (NOTE : Individual exam and assignment totals may change over the course of the semester causing a change in the available total point total.) All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades. See University Policy F13-1 (http://www.sjsu.edu/senate/docs/F13-1.pdf) for more details

Extra credit - Throughout the semester, there may be opportunities to obtain extra credit. I will make an announcement and post this information under Assignments with details.

There are 14 quizzes throughout the semester. They each have 10 questions, are open-book, open-note,and are untimed. They are due before class time on the date indicated on the course schedule. **You need to complete a minimum of 10 quizzes.** However, **if you take more quizzes, then the 10 highest scoring quizzes will be applied to your final grade. If you score more than 100 points in quizzes, left over quiz scores can be applied to your final grade.**

There will be four exams, worth 50 points each. All exams will include multiple-choice questions that cover material presented in the book AND in-class and will be administered on Canvas. They are open-note and open book exams, and you will have 1 hour and 15 minutes (1 class period) to complete them once you start and they must be submitted at 11:59pm of the day they are due (e.g., Friday at 11:59pm). If there are poor test questions (questions where more than 66% of students miss) you will automatically get credit for that question.

There is also an optional fifth exam that can replace your lowest-scoring exam. In other words, **if you take all five exams, I will count only your highest five scores toward your total points.**

If you have a legitimate reason for missing the exam, a makeup exam may be permitted. However, you will need to contact me as soon as you can before the exam is due to alert me that you will miss the exam and let me know your legitimate reason for missing the exam. You will also need to present written documentation verifying the legitimate reason, so that we can schedule the makeup exam as quickly as possible. All make-up exams must be completed before the next exam (e.g., Exam 3 make-up before Exam 4). There are no make-ups for the final exam.

If you are unable to contact Dr. Peña before the due date, complete the exam ASAP and contact Dr. Peña at least 24 hours after the exam was due. You will still need to provide a legitimate reason for a late exam and/or a meeting with Dr. Peña. However, you will be able to obtain at least 50% on your exam. Any attempt to complete the exam after the 24 hour grace period will be handled on a case by case basis.

Attendance

Attendance is the responsibility of the student. However, attendance itself may not be used as a criterion for grading. Students are expected to attend all meetings for their courses, as they are responsible for all material covered, and active participation is frequently essential to ensure maximum benefit to all class members. Participation may be used as a criterion for grading when the parameters and their evaluation are clearly defined in the course syllabus and the percentage of the overall grade is stated. The full policy language can be found under Attendance and Participation

See: https://www.sjsu.edu/curriculum/courses/syllabus-info.php

Breakdown

Assignments	Points	Percentage of total grade
Class participation 10 X 10 points each	100	~20%
Colab activities 5 X 40 points each	100	~20%
Quizzes 10 x 10 points each	100	~20%
Exams 4 X 50 points each	200	~40%
Total points	500	100%

Grade	Range	Notes
A+	97-100	485-500 points range
A	93-96	465-484 points range
A-	90-92	450-464 points range
B+	87-89	435-449 points range
B	83-86	415--434 points range
B-	80-82	400-414 points range
C+	77-79	385-399 points range
C	73-76	365-384 points range
C-	70-72	350-364 points range
D+	67-69	335-349 points range
D	63-66	315-334 points range

Grade	Range	Notes
D-	60-62	300-314 points range
F	Below 60%	Below 300 points

University Policies

Per University Policy S16-9 (PDF) (http://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. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Below is the anticipated course schedule for the Spring 2026 semester. Please note that the schedule may change and if it does, you will be notified of those changes as soon as possible.

When	Topic	Notes
Week 1: 1/22/26	Introduction	
Week 2: 1/27/26	Descriptive statistics and measures of central tendency	Chapter 1 Quiz 1
Week 2: 1/29/26	Variability and standard deviation	Chapter 2 Quiz 2
Week 3: 2/3/26	Intro to Colab and Ch 1 and 2 review	
Week 3: 2/5/26	Colab - Measures of central tendency and variability	**Colab activity 1**
Week 4: 2/10/26	Correlations	Chapter 3 Quiz for Ch 3
Week 4: 2/12/26	Colab activity -correlation	**Colab activity 2**
Week 5: 2/17/26	Exam 1 Review	**Exam 1 from Chapter 1 -3** **Exam 1**

When	Topic	Notes
Week 5: 2/19/26	Reliability and validity	Chapter 4 Quiz for Ch 4
Week 6: 2/24/26	The normal curve	Chapter 5 Quiz Ch 5
Week 6: 2/26/26		No class!
Week 7: 3/3/26	Kazdin lecture	No class - Kazdin lecture! See Canvas for extra credit assignment
Week 7: 3/5/26	Hypothesis testing	Chapter 6 Quiz Ch 6
Week 8: 3/10/26	Significance testing	Chapter 7 Quiz Ch 7
Week 8: 3/12/26	Exam 2 review	Exam 2 review Ch 4-7
Week 9: 3/17/26	Single sample z Test	Chapter 8 Quiz Ch 8
Week 9: 3/17/26	Exam 2	**Exam 2 from Ch 4- 7**
Week 10: 3/24/26	Independent samples t Test	Chapter 9 Quiz Ch 9
Week 10: 3/26/26	Colab - Independent samples t-Test	**Colab activity 3**
Week 11: Spring break No Class		SPRING BREAK: 3/30/26-4/3/26
Week 12: 4/7/26	One-Way Analysis of Variance	Chapter 10 Quiz Ch 10
Week 12: 4/9/26	Colab ANOVA	**Colab activity 4**
Week 13: 4/14/26	Exam 3	**Exam 3 Ch 8-10**

When	Topic	Notes
Week 13: 4/16/26	Factorial ANOVA	Chapter 11 Quiz Ch 11
Week 14: 4/21/26	Regression	Chapter 12 Quiz Ch 12
Week 14: 4/23/26	Regression	**Regression on Colab - extra credit**
Week 15: 4/28/26	Chi-square and other nonparametric tests	Chapter 13 Quiz Ch 13
Week 15: 4/30/26	Colab - Two-way Chi-square	**Colab activity 5**
Week 16: 5/5/26	Other topics	Chapter 14 Quiz Ch 14
Week 16: 5/7/26	Exam 4	**Exam 4 Chapter 11-14**
Finals week	Optional Exam 5	Optional Exam 5 due by 5/19 at 12:45pm