

MAT 131-02 Elem Stat & Probability, CN 41823, Spring 2025

Class meets MW 8:30 AM - 9:45 AM in SBS B203.

Instructor: Serban Raianu, office: NSM E-108, office phone: (310) 243-3139, cell phone: (657) 204-5612; e-mail address: sraianu@csudh.edu, URL: <http://math.csudh.edu/~sraianu>; office hours: Monday, Wednesday: 11:35 AM - 12:55 PM, 3:50 PM – 4:30 PM, or by appointment.

Course Description: A practical course in probability and statistics including such topics as normal distributions, confidence intervals, t tests, linear regression and correlation.

Text: *The Basic Practice of Statistics*, by David S. Moore. W.H. Freeman and Company, Sixth Edition.

Objectives: After completing MAT 131 the student will be able to

- demonstrate understanding of the relationship between a question that is asked in the natural, economic, and social sciences and the nature of the numerical data that are needed in order to provide an answer to the question,
- carry out the required algebraic manipulations, with appropriate use of a calculator, to analyze and understand the implications contained in a set of numerical data,
- draw a valid inference from a collection of numerical data.

Prerequisites: Quantitative Reasoning Placement Level 2 or completion of any of MAT 105, MAT 151, MAT 153, or MAT 191.

Grades: Grades will be based on **four full period written examinations** (60% total), a comprehensive **final examination** (25%), and **quizzes, homework** and (possibly) other assignments (15%) for the remainder. The exact grading system for your section is the following:

No makeup examinations will be given. The exams are taken in class and graded on Gradescope. Each of the **four exams** will be graded on a 0-60 scale, then the lowest score will be dropped and the average of the remaining scores is denoted by E.

Homework will be due at the end of the day on September 2, 7, 9, 23, 30, October 7, 21, 28, November 4, 16, 30 and December 2, and each homework is worth 10 points. The submission will consist of a summary of what was learned in the chapter and versions of problems done in class with the numbers changed. The average of all homework scores is denoted by H. Homework will be submitted as a pdf of your paperwork on Gradescope. There is no need to match the pages with the problems when submitting the homework, see

<https://www.youtube.com/watch?v=u-pK4GzpId0>

Gradescope can be accessed from the link your Canvas course, and you can practice submitting your work on Gradescope using the assignment called Submission practice, which will remain open throughout the semester. No late homework will be accepted.

15 minutes quizzes will be given on September 3, 8, 10, 24, October 1, 8, 22, 29, November 5, 17 and December 1, 3, and will be graded on a scale from 1 to 5. The average of the quiz scores is denoted by Q. Each quiz will consist of one problem, similar but not necessarily identical to one of the homework problems assigned for that week. The quiz will be taken in class and graded on Gradescope. No makeup quizzes will be offered.

The **final exam**, will consist of problems similar to problems assigned as homework throughout the semester, and will be graded out of a maximum possible 25 points. The score on the final is denoted by F. The final exam will

be taken in class and graded on Gradescope.

To determine your **final grade**, compute $E+H+Q+F$. The maximum is 100, and the grade will be given by the rule:

A: 93-100; A-: 90-92; B+: 87-89; B: 83-86; B-: 80-82

C+: 77-79; C: 73-76; C-: 70-72; D+: 67-69; D: 63-66; D-: 60-62 F: Less than 60.

You will be able to follow your progress in the class in Canvas under Grades throughout the semester.

Extra Credit: extra credit opportunities will be announced in class.

Accommodations for Students with Disabilities: California State University, Dominguez Hills adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with temporary and permanent disabilities. If you have a disability that may adversely affect your work in this class, I encourage you to register with Student disAbility Resource Center (SdRC) and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. Please note: no accommodation may be made until you register with the SdRC in WH D-180. For information call (310) 243-3660 or to use telecommunications Device for the Deaf, call (310) 243-2028.

Academic Integrity: The mathematics department does not tolerate cheating. Students who have questions or concerns about academic integrity should ask their professors or the counselors in the Student Development Office, or refer to the University Catalog for more information. (Look in the index under "academic integrity".)

Tentative schedule and homework assignments

M 8/25, W 8/27:	Chapter 1 (Picturing Distributions with Graphs)
M 9/1:	Labor Day
W 9/3:	Chapter 2 (Describing Distributions with Numbers)
M 9/8:	Chapter 3 (The Normal Distributions)
W 9/10:	Review
M 9/15:	Exam 1
W 9/17, M 9/22:	Chapter 4 (Scatterplots and Correlation)
W 9/24, M 9/29:	Chapter 5 (Regression)
W 10/1, M 10/6:	Chapter 8 (Producing Data: Sampling)
W 10/8:	Review
M 10/13:	Exam 2
W 10/15, M 10/20:	Chapter 9 (Producing Data: Experiments)
W 10/22, M 10/27:	Chapter 10 (Introducing Probability)
W 10/29, M 11/3:	Chapter 11 (Sampling Distributions)
W 11/5:	Review
M 11/10:	Exam 3
W 11/12:	Chapter 14 (Confidence Intervals: The Basics)
M 11/17, W 11/19:	Chapter 15 (Tests of Significance: The Basics)
M 11/24, W 11/26:	Fall Recess
M 12/1:	Chapter 18 (Inference about Variables)
W 12/3:	Review
M 12/8:	Exam 4
W 12/10:	Final review

Final examination: Wednesday, December 17, 8:30 AM – 10:30 AM.

Important Dates:

August 25 Monday Classes Begin

August 25 – September 18 Monday-Thursday Late Registration via MyCSUDH - fees due at time of registration

September 1 Monday Labor Day Holiday - NO CLASSES, CAMPUS CLOSED

September 5 Friday Instructor Drop Deadline

September 15 Monday Fall 2025 Graduation Application Deadline - with late fee

September 18 Thursday Credit/No Credit and Audit Grading Deadline

September 19 Friday Drop Without Record of Enrollment Deadline via Change of Program Form

September 19 Friday Student Census

September 22 – November 10 Monday-Monday Serious and Compelling Reason Required to Withdraw

October 1 Wednesday Spring 2026 Graduation Application Deadline – without late fee

October 13 – January 19 Monday-Monday Spring 2026 Registration via MyCSUDH

October 16 Thursday The Great California Shake-Out

October 21 – December 18 Tuesday-Thursday Winter 2026 Registration – fees due at time of registration

October 27 Monday Last Day for Pro-rata Refund of Non-Resident Tuition and Tuition Fees

October 27 Monday Last Day to Drop from FT to PT Status with Refund

November 1 Saturday First Day to file for Summer 2026 Graduation

November 12 – December 8 Monday-Monday Serious Accident/Illness Required to Withdraw

November 24 – 26 Monday-Wednesday Fall Recess, not a Holiday - NO CLASSES, CAMPUS OPEN

December 11 Thursday Last Day of Scheduled Classes

December 12 – 18 Friday-Thursday Final Examinations

December 12 Tuesday Grade Submission Begins

December 13 Saturday Spring 2026 Graduation Application Deadline – with late fee

December 19 Friday Evaluation Day

December 22, 3 pm Monday Final Grades Due (College of Continuing and Professional Education grades always due 72 hours after the course end date)

December 22 Monday Semester Ends