

Syllabus for STAT 310: Statistics for Social Sciences
Spring 2024, Section 2 (3 units)

Instructor: Eric Fox

Office: North Science 303A

Email: eric.fox@csueastbay.edu

Class Time and Room:

- Mon 12-1:40 at North Science 206
- Wed 12-1:40 at Valley Business and Technology Center 0223 (computer lab)

Office Hours: Tues/Thurs 1-2 at North Science 303A, or by appointment

Website: Course materials will be posted on Canvas.

Textbook: Diez, D., Barr, C. and Cetinkaya-Rundel M. *OpenIntro Statistics*, 4th Edition, 2019.
[Free PDF version posted on Canvas]

Software:

R, can be downloaded here <https://www.r-project.org/>

RStudio, can be downloaded here <https://www.rstudio.com/>

RStudio Cloud, <https://rstudio.cloud/>

Course Topics: This course will provide an introduction to statistics with a focus on applications to social sciences. Topics include exploratory data analysis, statistical inference, and linear regression. Computer labs will provide training in the use of the statistical programming language R.

- Data collection: sampling designs and experimental studies
- Descriptive statistics and data visualization
- Normal distribution
- Sampling distributions
- Confidence intervals
- Hypothesis testing
- Linear regression and correlation

Grading:

- 10% In-class activities and participation
- 15% Homework
- 15% Computer labs
- 20% Two Quizzes
- 40% Two Exams

Policy on Late Assignments: Late assignments will either receive a point deduction or not be accepted. However, your lowest scoring homework and lab assignment will be dropped.

Policy on Makeup Exams: If you miss an in-class exam due to illness or an emergency situation and provide documentation (e.g., a doctor's note) I may agree to schedule a makeup exam. Students who miss an exam and do **not** provide adequate notification or documentation will receive a point deduction of at least 10%.

Attendance Policy: Students are required to attend class on campus during the scheduled times and participate in class activities.

Important Dates:

- First day of classes: Tuesday, January 16
- Last day to drop: Monday, January 29
- Spring break: April 1-5
- Last day to withdraw: Friday, April 14
- Last day of classes: Friday, May 3

A complete list of important dates:

<https://www.csueastbay.edu/registrar/important-dates/spring-2024.html>

Student Learning Outcomes: Upon successful completion of this course, students should be able to:

- Apply statistical methodologies, including (a) summary statistics and graphical displays, (b) hypothesis testing and confidence intervals, and (c) linear regression and correlation.
- Understand basic theory underlying these methodologies.
- Use R and RStudio to analyze data sets and implement statistical methods.
- Communicate statistical concepts clearly and appropriately to others.

Common Syllabus Items: Items such as policies on academic integrity, disability, handling emergency situations, and protection against discrimination, harassment, and retaliation can be found under "University Policies" on Canvas.

Student Services: To access student services offered at Cal State East Bay, click on the My-Compass icon to get you to your one-stop online student support hub for information on academic advising, tutoring, financial aid, the library, the health center, technology support, career counseling, campus life, equity programs, and more.

Grade Appeal and Academic Grievances: If you wish to appeal your course grade at the end of the semester or have other academic concerns related to a course, please visit the Grade Appeals and Academic Grievances (GAAG) section of the catalog, which explains the process.