

Introduction to Statistics (STATS C1000)

Mrs. Ardella Newton

Room 910

Fall Term 2026

Contact Info: anewton@puhsd.k12.ca.us or anewton5@sierracollege.edu or Canvas Messenger

Office Hours: Monday – Friday 8:00 am – 8:30 am

Units: 4 credits

COURSE INFORMATION

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. (CSU, UC-with unit limitation)

Prerequisite: Completion of Integrated Math 3 with a grade of "C" or better or completion of Math D or E with a grade of "C" or better; or placement by matriculation assessment process; or equivalent.

Outcomes: Upon successful completion of the course, a student should be able to:

- Label and identify data by type and level of measurement.
- Construct and interpret data using graphical and numerical methods of descriptive statistics.
- Calculate and interpret problems involving basic elements of probability and sampling.
- Conduct hypothesis tests and construct confidence interval estimates for population means and proportions; chi-square tests for goodness-of-fit and independence; linear regression and correlation; and one-way analysis of variance (ANOVA).
- Logically present clear, complete, and sufficiently detailed solutions to demonstrate understanding and communicate reasoning of statistical methods using technology when appropriate.

Materials:

- Textbook: [Introductory Statistics](#) by Illowsky and Dean; OpenStax (This textbook is chosen by Sierra College math department. PUHSD has no involvement in the selection process and does not evaluate the courses' textbooks, curriculum, or supplemental materials.)
- You can order a hardcopy from Amazon (if you want) for about \$30
- Technology: A scientific calculator and chromebook are required for the course. Graphing Calculator is recommended but optional.

EXPECTATIONS

- The expectations I have for you are the same you should have for me.
 - **Be Prepared** Bring textbook, pencil, paper, and necessary materials.
 - **Be Respectful** Everyone has a right to learn; I have the right to teach.
 - **Be On Task** Class time is an opportunity for you to learn-- use it wisely.
- For a traditional 4-unit course, you should be spending roughly **4 – 8 hours** a week on class material outside of the 4-hour lecture time.
- To be successful in this class (and all math classes) you need to be continually practicing and reviewing new and old concepts. You **cannot** put in a minimal amount of effort into this class and expect to be successful.
- I will typically respond to emails within 24-hours during the week.
- Graded work will be returned within 1-week of the submission date.
- Be sure to check Canvas at least 3 times a week for announcements/email.
- Please ask questions; I cannot read your mind. This class can be hard and will move quickly. Do NOT give up. Ask for help early; do NOT wait until the day before the test.

Dual Enrollment Information

Dual Enrollment is an opportunity to earn college and high school credit simultaneously. Because this course is a college course, there are a number of distinctions that are important to understand.

- The college has full discretion in the course objectives, curriculum, textbooks and materials. If the course material, objectives, or textbooks are of concern, please remember this is an elective course and you can enroll in a non-dual enrollment course as an alternative.
- Dual Enrollment courses will be a part of your official college transcripts and will follow you after high school.
- If a student has an IEP or 504 Plan with accommodations, not all of those accommodations may be available. You will need to contact the college and register with [Student Accessibility Services \(SAS\)](#).
- [Family Educational Rights and Privacy Act \(FERPA\)](#) protects the privacy of students and prevents instructors from providing information to parents and others unless a student signs a FERPA Waiver. If you wish to have your parents and/or others have access to your grades and progress in the course please fill out a waiver form.

* This syllabus is subject to change based on the needs of the class. *

GRADE BREAKDOWN

Assignments: (5%)

- Assignments will be given daily, collected on the first day of the week (usually Monday), with no work being accepted after Wednesday of the same week.
- I encourage you to work with other students on the assignments, but you are responsible for your own work and understanding.
- Assignments can feel “boring”, but are the **key to learning** and being successful in this class.

Assessments: (95%)

□ Quizzes: (20%)

- Given most weeks (usually Friday) and are a combination of recent and review topics.
- A **missed quiz** will result in a score of 0. The only time to make up the quiz is the following day before school or the day prior 5th block or after school. The two lowest quiz scores will be dropped.

□ Exams: (50%)

- Three Exams will be given throughout the semester and will be based on the information found in the textbook and presented in class.
- There are NO make-up exams. An absence/missed exam will result in a score of 0 for that exam unless **prior arrangements are made in advance**.
- Cell phones are NOT allowed on the exam, and you will not be able to leave the room or the session during an exam.

□ Final: (25%)

- Cumulative Exam given the last week of the semester.
- The final exam score can be used to replace the lowest exam score.
- Cell phones are NOT allowed on the exam and you will not be able to leave the room or the session during an exam.

Grading Scale:

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

COURSE CALENDAR (subject to change)

- Week #1 – 4: Descriptive Statistics · Exam #1 – Week #6
- Week #5 – 8: Probability · Exam #2 – Week #9
- Week #9 – 15: Inference Procedures · Exam #3 – Week #15
- Week #16: Regression · Final Exam – Week #17

ACADEMIC ETHICS

- Cheating/copying another student's work is contrary to the learning process and will NOT be tolerated. Please do NOT do it.
- Cheating includes but is not limited to:
 - submission of work that is not your own, getting help on an exam, helping someone else on an exam, copying someone else's work or answers during a test, exam, quiz or assignment (or using a solutions manual), using PhotoMath or any other app/online program (unless otherwise indicated that it is acceptable for it to be used)
- Cheating on an assignment will result in a zero for that assignment and possibly the failure of the course and academic probation or suspension from the college per the [Sierra College Academic Honesty Policy](#). Please see Sierra College Board Policy No. 5515 (Honesty in Academic Work) in the Student Handbook and the PUHSD/Del Oro Student Handbook for more information regarding cheating. ***It's not worth it.***

TITLE IX

- So that the college can provide students with appropriate services and assistance, I am required to share with the College's Title IX Coordinator any instances of sexual harassment, sexual violence, and/or other forms of prohibited discrimination.
- If you would rather share information about sexual harassment, sexual violence, or discrimination to a confidential employee who does not have this required responsibility, call a campus advocate at (916) 660-8400. Campus advocates are available at each college campus and provide confidential counseling, crisis intervention and connection to campus and community resources.
- In accordance with the Americans with Disabilities Act requirements, PUHSD and/or Sierra College can accommodate most special needs. Students with a documented physical or learning disability (documentation must be on file prior to the beginning of the semester) may request accommodations.

EMERGENCY PROCEDURES

TUTORING RESOURCES

- The math tutoring center at Sierra College offers free in-person and online tutoring options.

Let's work hard together to have a successful term!

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