

Syllabus

Course Web Page: <http://rohan.sdsu.edu/~babailey/stat250>
and blackboard.sdsu.edu

Meeting Time: Lectures: MWF 10:00 - 10:50 a.m. in HH 130

Instructor: Professor Barbara Bailey
GMCS 513
email: babailey@sciences.sdsu.edu
Office Hours: M 11:00 a.m. - 12:30 p.m., W 3:00 - 4:30 p.m; by appointment

Course Description: Topics include descriptive statistics, data displays, measures of central tendency and variability, random variables, sampling distributions, estimation and hypothesis tests for means and proportions, linear regression and correlation.

Student Learning Goals: After completing the course, students should be able to:

- Recognize whether an experiment or survey is well designed.
- Understand how to produce a sample that represents the population of interest.
- Summarize data using both graphical and numerical methods.
- Produce and interpret statistics and graphs, using regression techniques, to describe the relationship between two numerical variables.
- Test and interpret hypotheses for the linear regression model.
- Use basic probability principles in a variety of practical applications
- Identify, and calculate probabilities for, binomial and normal probability distributions.
- Understand the concept of sampling distributions.
- Use statistical methods to construct, and interpret, interval estimates for population means and proportions. The student will learn both small sample (t-distribution) and large sample (normal distribution) methods.
- Formulate, test and interpret various hypotheses for population means and proportions.
- Construct confidence intervals, and test hypotheses for differences in two population means or proportions, and interpret results.
- Use a statistical software package to display data and carry out statistical data analysis.

Text: Utts and Heckard, Mind on Statistics 4th Edition. A custom 3-hole punched version of the book titled "Statistical Principles and Practices" is available at the bookstore bundled with Aplia online homework access.

Blackboard: This course will make use of Blackboard 9.1 for posting announcements, course calendar, lecture information, assignments, and grades. Login to Blackboard at <https://bb91.sdsu.edu/webapps/login>. For help with Blackboard, go to <http://its.sdsu.edu/blackboard/student/>.

Calculator: Each student will need a statistical calculator with bivariate data capability. A TI-83 or TI-84 is recommended. Devices capable of transmitting data such as laptops and smartphones cannot be used as calculators for exams. If you need help using the functions of your calculator, please bring the instruction guide with you to office hours so I may assist you.

Grading: The grade for the class is based on a score composed of the following:

Participation/Practice Problems	10%
Homework	15%
Quizzes/Computer Assignments	15%
Two Midterm Exams	30% (15% each exam)
Final Exam	30%

Grades will be assigned as follows:

92.6%-100%	A	72.6%-77.5%	C
90%-92.5%	A-	70%-72.5%	C-
87.6%-89.9%	B+	67.6%-69.9%	D+
82.6%-87.5%	B	62.6%-67.5%	D
80%-82.5%	B-	60%-62.5%	D-
77.6%-79.9%	C+	<60%	F

Participation/Practice Problems: To encourage participation and active learning Participation/Practice Problems will be turned in at the end of almost every class. Selected problems will be graded for credit. These problems will be returned to you in class. You will be assigned a class number to help in returning these papers, efficiently. A notebook to keep these problems organized is recommended. Your lowest percentage score will be dropped.

Homework: Homework will be web-based using Aplia. You should purchase an access code with your new book or buy an access code directly from Cengage. The code for our course is U6FP-NLNG-URJ8

Homework assignments will be regularly available on the course blackboard page as announced in class. Points per assignment will vary depending upon length. Your lowest percentage score will be dropped. These assignments will generally be due at 11:55 pm Monday. Aplia will not allow you to submit late homework. The homework serves as a tool to review and practice the material covered in class. All material covered on the assignments can be questioned on the exams.

Quizzes/Computer Assignment: Quizzes will be given using Blackboard as announced in class. Points per quiz/assignment will vary depending upon length. Your lowest percentage score will be dropped. Some quizzes will require use of the free statistical software *R*. There is web based version and you may also download *R* from the web site www.r-project.org. The *R* project web site and course web page will contain links to primers and introductory materials on *R*. We will have introduction to *R* sessions during classes, times to be announced.

Exams: There will be two in-class exams on Wednesday February 22 and April 11. The exams will be closed book. Formulas and tables will be provided. A hand calculator is necessary for all exams.

No makeup exams are given - no exceptions.

The final exam will be given Friday, May 11 from 10:30 a.m. to 12:30 p.m. in HH 130. The final will be cumulative and comprehensive.

You must bring a No. 2 pencil and ParScore form F-289 to each exam: none will be provided. You should also bring a RedID or other photo ID, and a calculator with you for the exams.

Advice: (on being successful in this course)

- Attend EVERY lecture and be a practice problem participant. Missing just one class can put you behind. Take an interest in your grade from DAY 1. Waiting until the end of the semester to improve your grade will not work.
- Read the chapters thoroughly including the chapter summary and the formulas at the end. Due to the time frame, lectures will not cover every concept in detail, so it is your responsibility to read the chapter BEFORE class and before attempting the homework.
- Please come to my office hours prepared with specific questions. Be proactive: If you are in need of help, get it immediately. That is what my office hours are for (they begin the second week of class).
- Stay organized! Get a three ring binder to put all of the practice problems and lecture notes in.
- Study effectively: redo all problems from the lecture and practice problems. Use flashcards to help you remember terminology. Reread your notes from class and the chapters from the text. Form study groups with others in the class. Sometimes you can better understand the material after discussing it with your peers.

Class Environment, Tardiness and Early exits: I would appreciate your cooperation in creating an environment of mutual respect, devoted to learning in our classroom. Turn your cell phone to silent before class. The class time is from 10:00 - 10:50 a.m. As common courtesy to your fellow students, we would appreciate if you show up to class on time and leave when dismissed at 10:50. If you must leave early, please sit on the aisle near an exit so as not to disturb students listening to and trying to learn from the lectures.

SDS: Student Disability Services (594-6473) is the campus office responsible for determining and providing appropriate academic accommodations for students with disabilities. Students needing these services should visit the following site: <http://www.sa.sdsu.edu/sds/index.html>

Code of Academic Conduct on Examinations and Assignments: “At San Diego State University, students are invited to be active members of the educational community. As with any community, its members serve a vital role in determining acceptable standards of conduct, which includes academic conduct that reflects the highest level of honesty and integrity.” The “Statement of Student Rights and Responsibilities clarifies for students their role as members of the campus community, setting forth what is expected of them in terms of behavior and contributions to the success of our university.” “Inappropriate conduct by Students . . . is subject to discipline on all San Diego State University Campuses. The Center for Student Rights and Responsibilities coordinates the discipline process and establishes standards and procedures in accordance with regulations contained in Sections 41301-41304 of Title 5 of The California Code of Regulations, and procedures contained in Executive Order 628, Student Disciplinary Procedures for The California State University.” See <http://www.sa.sdsu.edu/srr/judicial> for more information.

How to access your Aplia course

STAT 250 - Bailey - Spring 2012

Instructor: Barbara Bailey

Start Date: 01/16/2012

Course Key: U6FP-NLNG-URJ8

Registration

Aplia is part of CengageBrain, which allows you to sign in to a single site to access your Cengage materials and courses.

1. Connect to <http://login.cengagebrain.com/>
2. **If you already have an account, sign in.** From your Dashboard, enter your course key (**U6FP-NLNG-URJ8**) in the box provided, and click the *Register* button.
If you don't have an account, click the *Create a New Account* button, and enter your course key when prompted: **U6FP-NLNG-URJ8**. Continue to follow the on-screen instructions.

Payment

Bookstore: Purchase access to Aplia from your bookstore. It is bundled with a 3-hole punch version.

Online: Purchase access to your course (including the digital textbook) from the CengageBrain website. If you choose to pay later, you can use Aplia without paying until 11:59 PM on 02/05/2012. (After paying, you will have the option to purchase a physical book at a discounted price.)