

AMS 7L Computer Lab for Statistics (AMS 7) Summer 2019 (I)

Course Policies and Syllabus

Instructor: Matthew Heiner
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Lab Sessions:

Wednesdays 3:00 – 4:30 pm Social Sciences 1, Room 135 (Windows Lab)
Fridays 1:00 – 2:30 pm Social Sciences 1, Room 135 (Windows Lab)

Please attend the first lab for orientation. Subsequent lab attendance is NOT required.

Web page: All announcements and lab assignments are in *Canvas*. Login to your *Canvas* using your GoldID and password and enter “AMS 7L Summer 19”. The login page for *Canvas* can be accessed using the following URL:

<http://canvas.ucsc.edu>

Associated Lecture:

Dan Spencer, MWF 9:00 – 11:30 am, Earth & Marine Sciences B214

Course Objectives: To acquire the technological skills needed to implement methods learned in STAT 7 using the statistical software [JMP](#), and to reinforce various concepts from STAT 7 through computer simulation and data analysis.

Lab Assignments: Lab assignments will be completed, submitted, and reviewed in *Canvas*. All lab assignments will be posted in the *Modules* section. Assignments will be comprised of *Canvas Quizzes* and *iMathAS* question sets. Data files used in labs can be accessed in the *Modules* themselves, but they are also available for download in the *Files* tab on *Canvas*.

Labs will be posted and due once a week. Labs will be posted every Monday at 9:00 am and due the following Monday at 9:00 am.

Labs are self-paced and do NOT have a time limit; however, ALL labs MUST be submitted by the posted due dates. Most lab assignments will consist of multiple sections, each of which you will be expected to complete, submit, and review one at a time before starting the next section of the lab. You do not have to complete all lab parts in one session. *Canvas Quizzes* allow you to save parts and return to complete them at a later time, but *iMathAS* question sets do not. It is recommended that you record all answers by hand if you wish to return to an assignment at a later time. Labs are designed to take approximately 90 minutes to complete all parts combined, but may be shorter or longer depending on your familiarity with the material. Each part of a lab may be submitted twice, with the highest score counting toward your grade. You are allowed

and encouraged to work on labs alongside your peers, but every student is expected to do their own calculations and JMP analysis required by the lab. Submitting work not completed by you is a violation of academic integrity. For more information on academic dishonesty, refer to the Academic Dishonesty section below.

Late Work: Late submissions will **NOT** be accepted. The class accommodates missing Lab assignments by designating Labs 5 and 10 as extra credit (see **Course Grade** section below). Therefore, instructors will adhere to a strict assignment submission policy. Complete the labs early in the week. Do not wait until the day the assignments are due! In cases of extenuating circumstances (typically requiring documentation, i.e. doctor's note), accommodating late work will be left at the discretion of the instructor. In such cases, email the instructor at least 48 hours before the due date of the assignment.

Student Support: Students are encouraged to email the instructor at any time throughout the course. Emails may be sent directly to an instructor or by using the *Messages* tool in *Canvas*. Note that last-minute emails may not be answered immediately. Be sure to send your inquiries to instructors well before the due date (don't wait until the night before to do the lab). In-person appointments may be scheduled if additional help is needed.

Schedule and Content List:

Lab #	Due Date	Content
Lab 1	July 1, 9 am	Practice with Data Types, Starting JMP.
Lab 2	July 1, 9 am	Looking at data. Measures of central tendency, Measures of dispersion.
Lab 3	July 8, 9 am	Relative Frequency, Probability (including Bayes Theorem), Binomial and Poisson distribution.
Lab 4	July 8, 9 am	Means of Normals, Central Limit Theorem, Normal Approximation to Binomial
Lab 5	July 15, 9 am	EXTRA CREDIT. Review lab.
Lab 6	July 15, 9 am	Confidence Intervals for Means, Confidence Intervals for Proportions.
Lab 7	July 22, 9 am	One Sample Hypothesis Tests for Means, Hypothesis Tests for Proportions. Two-sample Tests for Means.
Lab 8	July 22, 9 am	Regression, Residuals and Transformations
Lab 9	July 29, 9 am	Multiple Regression, Goodness-of-Fit Tests
Lab 10	July 29, 9 am	EXTRA CREDIT. Polynomial Regression, Optimization.

Course Grade: Grades will be based on a point system. Each question within a required lab is worth one point. The total number of questions in the eight required labs is approximately 250, and the primary grade percentage will be calculated out of the total. Extra credit labs carry an additional 20% total, more than enough to replace an entire missed lab. The final score (the raw percentage plus extra credit) will determine a student's letter grade: 90% - 100% is an A, 80% - 89% is a B, 70% - 79% is a C, 60% - 69% is a D, and 0 - 59% is an F. Note that A+ will not be given for students who finish higher than 100%. We will not round or bargain for scores that are

borderline between different grade levels.

DRC Accommodations: The Disability Resources Center reduces barriers to inclusion and full participation for students with disabilities by providing support to individually determine reasonable academic accommodations. If you have questions or concerns about accommodations or any other related matter, please contact the DRC office, located in Hahn 125 or at 831-459-2089 or drc@ucsc.edu.

Academic Dishonesty: Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree.

All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.

In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.

For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the [Academic Integrity page](#) at the Division of Undergraduate Education.

Title IX: The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors. The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. [Information about the Title IX Office](#), the [online reporting link](#), applicable campus [resources](#), reporting responsibilities, the [UC Policy on Sexual Violence and Sexual Harassment](#) and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at titleix.ucsc.edu. The Title IX/Sexual Harassment Office is located at 105 Kerr Hall. In addition to the [online reporting option](#), you can contact the Title IX Office by calling 831-459-2462.

Session deadlines:

- Drop: Monday, July 1
- Change grade option: Friday, July 5
- Withdraw: Friday, July 12

Summer Session does not drop students for non-attendance or non-payment. Students must drop themselves.