STAT-7L - Computing Lab for Introductory Statistics Course Policies and Syllabus

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Welcome to STAT-7L! This document serves as the syllabus for the course and outlines the structure of the class; please read it carefully. Feel free to email me with any questions.

1 General Info

- Web Page: This class is run primarily through Canvas, including all assignments and announcements. To find the main web page, log in to Canvas at canvas.ucsc.edu using your CruzID and Gold password then navigate to STAT-7L.
- **Regular Meetings:** STAT-7L has no lecture or any required meetings. Regular weekly lab times serve as both weekly office hours and a dedicated time each week to work on the assignments.
- **Text and Materials:** JMP is the main learning tool for this class and instructions for acquiring it will be given (it is free for students). There is no required textbook, but students should refer to materials for the associated section of STAT-7 for clarification on concepts.
- Course Objectives: The objectives for a student enrolled in STAT-7L are 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.

2 Course Structure

STAT-7L is organized into weekly¹ labs consisting of 2-4 quiz-type assignments. Each quiz will either be hosted directly on Canvas or through the external plugin iMathAS. There are no other assignments besides these weekly quiz sets; no tests, exams, papers, or projects. The rest of this section provides details on assignments, grading, and various policies.

2.1 Lab Assignments

- Access all quizzes through Canvas: All lab assignments, including both Canvas quizzes and iMathAS assignments, are found in the *Modules* section of Canvas. Data files used in labs can be accessed in the *Modules* themselves, but they are also available for download in the *Files* tab or at the Google Drive folder linked on the Canvas Home page.
- Quizzes contain main course content: Although the term "quiz" is used to describe the assignments, it is more helpful to think of them as guided homeworks. 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. Each quiz will walk you through the steps to perform requested calculations, then provide you the opportunity to perform the calculation on your own.

 $^{^1\}mathrm{For}$ summer sessions the pace is 2 labs per week.

- Quizzes are not timed: Labs are self-paced and do NOT have a time limit other than the posted due dates. You do not have to complete all lab parts in one session you may save your work and continue later, but note that the *iMathAS* quizzes do not save your work automatically. Expect to spend approximately 90 minutes total on any given lab.
- Labs are due weekly: All assignments for a given lab will be posted on Saturday at 12:01 am and are due the following Friday at 11:59 pm. See the late policy for information on late submissions. The instructor reserves the right to adjust due dates of any assignments. For summer sessions, 2 labs will be due each week. Each pair of labs will release and be due at the same time.
- All assignments allow 2 attempts: Each lab assignment may be submitted twice, with the highest score counting toward your grade. Be careful: you are given two submissions for the whole assignment, not each question.
- Working in groups: 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 as 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.

2.2 Grading

Each question within a lab assignment has an associated point value, which is earned when answered correctly. Note that not all labs have the same number of available points. The overall course grade will be determined by the percentage of points earned out of the total amount available. There are approximately 200 points available between all graded assignments. The following grading scale will be used to convert overall course percentages to letter grades.

Percent Range	Letter Grade
92.5%- $100%$	А
89.5%- $92.49%$	A-
86.5%- $89.49%$	B+
82.5&-86.49%	В
79.5%- $82.49%$	B-
76.5%- $79.49%$	$\mathrm{C}+$
72.5%- $76.49%$	С
69.5%- $72.49%$	С-
66.5%- $69.49%$	$\mathrm{D}+$
62.5%- $66.49%$	D
59.5%- $62.49%$	D-
0%-59.49%	F

The instructor reserves the right to modify this grading scale, to adjust point values of questions and/or assignments, and to modify the available total number of points. These are to accommodate changes in course pacing and content coverage of the associated STAT-7 class.

On a technical note: a grade of zero will be given for any assignments not turned in; this should be self-evident. However, be aware that this score may not automatically appear in Canvas after the due date, particularly for iMathAS assignments. These will eventually be added manually, but your overall grade in Canvas will appear inflated in the interim. It is your responsibility to consider this when, for example, deciding whether to complete extra credit assignments.

2.3 Extra Credit

There are two opportunities for extra credit in 7L: Lab 5 and lab 7D^{*}.

• The amount of extra credit available is 20% of the available points in the course. The actual number of points will be adjusted as it becomes clear what STAT-7 content will be completed by the end of the quarter.

- Much like graded assignments, each extra credit question has a point value and the amount of overall extra credit received will be calculated as the percentage of extra credit points earned out of the number of extra credit points available.
- The 7L Canvas site does not treat extra credit on an out-of-zero basis. To prevent confusion which this may cause, scores of zero have been given by default for all extra credit assignments. Once an extra credit assignment has been completed, the zero will be replaced with the earned score.

2.4 Extensions and Late Policy

- General rule: As stated in the Lab Assignments section, all assignments for a given lab are due on a Tuesday at 11:59pm, unless otherwise modified by the instructor. Work completed after this deadline is considered late work. Generally, late work is unacceptable and will be given a score of zero.
- Grace period: Strict late policies may feel unduly harsh, but they provide simplicity and clear expectations on both the part of the student and the instructor. However, such rigidity ignores both unfortunate circumstance and the human errors that we all make from time to time. To balance the simplicity of strict due dates with the compassion of flexible deadlines, this class uses a grace period policy. The 24 hour period after a deadline is called the grace period. Any assignment turned in within the grace period will be marked as late, but will be graded as if it were turned in on time. After the grace period has passed, the assignment will be rejected and given a score of zero.
- Do not abuse the grace period: The grace period is there to give students a systematic, yet compassionate system for handling mild forgetfulness, running out of time, internet outages, and other unanticipated events. The safest option is to never plan on using the grace period and to turn in assignments by the posted due dates.
- Canvas terms: The due dates given on Canvas correspond to when an item is due. However, the grace period extends 24 hours beyond the due date, which is represented in Canvas as the submission window or availability window extending beyond the due date. Once the grace period passes, Canvas will not allow new submissions.
- Extension requests: Some extenuating circumstances require a student to request a deadline extension for longer than the 24 hour grace period. If this occurs, do not hesitate to reach out to the instructor. ALL EXTENSION REQUESTS MUST BE SUBMITTED BEFORE THE DUE DATE. All extension requests are at the discretion of the instructor, but if a problem arises during the grace period or after, it is unlikely that an extension will be given.

3 Content List

Lab $\#$	Content
Lab 1	Practice with Data Types, Starting JMP.
Lab 2	Looking at data. Measures of central tendency, Measures of dis-
	persion.
Lab 3	Relative Frequency, Probability (including Bayes Theorem), Bi-
	nomial and Poisson distribution.
Lab 4	Means of Normals, Central Limit Theorem, Normal Approxima-
	tion to Binomial
Lab 5	(Extra Credit). Review lab.
Lab 6	Confidence Intervals for Means, Confidence Intervals for Propor-
	tions.
Lab 7	(7D Extra Credit) One Sample Hypothesis Tests for Means, Hy-
	pothesis Tests for Proportions. Two-sample Tests for Means.

4 Support Information

Student Support: Students are encouraged to email instructors 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.

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 disability-related matter, please contact the DRC office, located in Hahn 125 or at 831-459-2089 or drc@ucsc.edu. If you have received a DRC letter for accomodations, please email the instructor to discuss details for implementing those accommodations.

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.