

Course Policies and Syllabus

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Lab Sessions: Monday, Wednesday 1 – 2:45 pm, Social Science I 135

Web page: All announcements and lab assignments are in eCommons. Login to your eCommons using your GoldID and password and enter Summer 2014 AMS 7L. The login page for ecommons can be accessed using the following url:

<https://ecommons.ucsc.edu/xsl-portal>

Associated Lectures:

Valerie Poyner, Monday, Wednesday 9:30 – 12:30 pm, Physical Sciences 140.

Required Text: *Biostatistics for the Biological and Health Sciences*, M. M. Triola and M. F. Triola, Pearson (2006).

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

Lab Assignments: Lab assignments will be completed, submitted, and reviewed in eCommons. The labs will be posted in the *Tests & Quizzes* section.

Lab assignments will be posted and due once a week. Labs will be posted every Monday at 9:00AM and due the following Monday at 9:00AM with the exception of the last lab which will be due on the last Friday of the Summer session. The first lab will be **due on Monday June 29th at 9:00AM**.

Labs are self-paced and do NOT have a time limit, however, ALL labs MUST be submitted by the posted due date. Late submissions will NOT be accepted. You do not have to complete lab assignments in one session. There is the option to save assignments in ecommons and return to complete them at a later time. Most lab assignments will consist of 3-4 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. 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. You are allowed and encouraged to work on labs along side your peers, but every student is expected to do their own calculations and JMP analysis required by the lab. Academic dishonesty is against school policy.

Lab Sessions: There are two drop-in lab sessions (see above for time and location). Students are REQUIRED to attend their assigned lab session beginning **Monday, June 22nd**, so that each lab will have met in person BEFORE the first lab is due.

Lab attendance is NOT required for lab sessions after June 22nd. Students may attend ANY of drop-in sessions as needed for help on lab assignments.

Student Support: Students are encouraged to emails instructors at any time throughout the course. Emails may be sent directly to an instructor or by using the *Messages* tool in eCommons. Lab instructors will also monitor the *Discussion Forum* and provide response when necessary. Note that last minute emails may not be answered immediately, thus 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.

All data files used in labs can be found in *Resources* in eCommons.

Schedule and Content List:

| Lab # | Due Date | Content |
|--------|----------|--|
| Lab 1 | 6/29 | Sections are required. Practice with Data Types, Starting JMP. |
| Lab 2 | 6/29 | Looking at data. Measures of central tendency, Measures of dispersion. |
| Lab 3 | 7/6 | Relative Frequency, Probability (including Bayesian Theorem), Binomial and Poisson distribution. |
| Lab 4 | 7/6 | Means of Normals, Central Limit Theorem, Normal Approximation to Binomial |
| Lab 5 | 7/13 | Review lab. |
| Lab 6 | 7/13 | Confidence Intervals for Means, Confidence Intervals for Proportions. |
| Lab 7 | 7/20 | One Sample Hypothesis Tests for Means, Hypothesis Tests for Proportions. Two-sample Tests for Means. |
| Lab 8 | 7/20 | Regression, Residuals and Transformations |
| Lab 9 | 7/24 | Multiple Regression, Goodness-of-Fit Tests |
| Lab 10 | 7/24 | Optional lab. Polynomial Regression, Optimization. |

Course Grade: Grades will be based off of a point system. Labs are worth 100 points each. Sixty points will be awarded simply for completing (and submitting) ALL sections of a lab

assignment. Students may receive 30 completion points if AT LEAST half the lab sections are completed (eg. 2 out of 3, 2 out of 4, 3 out of 5, etc.). The remaining forty points will be awarded for correct answers. The first nine labs are required, so that total number of points for the course is 900. A tenth lab assignment will be available to replace your lowest Lab score. The same rubric applies to Lab 10, 60 points completing ALL elements of the lab and 40 points will be allocated for correct answers. The percentage of the total points earned (out of 900) 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 people who earn more than 900 total points.