Math 11/11L, Calculus-Based Introductory Probability and Statistics

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Office:	6157 Applied Physics and Mathematics
Office Hours:	Tuesdays 4:00-5:00 PM, Wednesdays 9:30-10:30 AM, Thursdays 5:00-6:30 PM
	other times by appointment
Math 11 Web Page:	http://www.math.ucsd.edu/~jschwein/11.html
	(or go to http://www.math.ucsd.edu and click on "Course Web Sites")
Math 11L Web Page:	http://www.math.ucsd.edu/~jschwein/11L.html
Prerequisites:	Math 10AB or 20AB

Course Content: We will cover most of chapters 1-27 of the textbook. This will include material on descriptive statistics, probability theory, and statistical inference. Because Math 11 students have seen calculus, we will also discuss some material on continuous probability that is not in the textbook. A list of what topics will be covered each day is on the course web page.

Math 11L: All students who enroll in Math 11 must enroll in the one-unit lab course Math 11L, and vice versa. No exceptions will be made. Math 11L computer assignments will require knowledge of the material being taught concurrently in Math 11, while Math 11 exams may test some material covered in Math 11L (such as how to interpret computer output). Lab sections will be held each Tuesday in APM B432. Due to space limitations, students must attend the section in which they are enrolled.

Textbook: The require textbook is *Stats: Data and Models* by De Veaux, Velleman, and Bock. The bookstore sells both hardback copies and a cheaper binder-ready version. Either version is fine. However, you must have the 3rd edition. You have the option of purchasing the textbook bundled with the student version of Minitab, which would allow you to run Minitab from your home computer if your computer runs windows.

Statistical Software: Students will complete the labs for Math 11L using Minitab. This software has been installed in the ACMS labs in rooms B325, B349, and B432 in the basement Applied Physics and Mathematics. Minitab is also available using the virtual computing lab. You are encouraged to learn how to use the virtual lab so that you can run Minitab from home.

Graphing Calculators: Although a graphing calculator is not required for the course, it is likely to be helpful. Having a graphing calculator avoids the need to use tables for statistical inference. Graphing calculators will be permitted on exams. The TI-83 is recommended for Statistics, but other calculators such as the TI-89 are fine also.

Homework: Homework assignments will be due each Friday. Assignments will include an online portion, consisting of 10 multiple choice questions to be answered in TED, and a written portion. The online portion is intended to give you prompt feedback about conceptual issues. For the written portion, you should carefully show the steps in your calculations, not just the final answer. Homework will be due at the beginning of class at 2:00 PM on Fridays. If you can not turn in your homework during class, you may place it in your TA's box in the basement of Applied Physics and Mathematics before 1:30 PM on the due date.

Computer Labs: There will be eight computer lab assignments associated with Math 11L. These assignments will be due at 9:00 PM on Wednesdays. You will have a chance to ask questions about them in your lab section the previous Tuesday. Lab sections will meet every Tuesday except April 22 and May 20. You should submit your assignments online using TED.

Exams: There will be two midterm exams and a final exam. The midterm exams will be held during class on Monday, April 21, and Monday, May 19. The final exam will be held from 3:00-6:00 PM on Friday, June 13. You will be permitted to use a calculator during the exams. You will not be permitted to use notes or your book, but you will be provided with a list of formulas. Please bring your student ID to the exams.

Grading: You will receive separate grades for Math 11 and Math 11L. However, to receive a passing grade in either Math 11 or Math 11L, you must be enrolled in the other. Your Math 11L average will be obtained from your scores on the 8 computer lab assignments. Your Math 11 average will be calculated as follows:

$$(.05)*(\text{Online Homework}) + (.15)*(\text{Written Homework}) + (.20)*(\text{First Midterm}) + (.20)*(\text{Second Midterm}) + (.40)*(\text{Final Exam})$$

No homework or lab scores are dropped when computing your final average. After your average is calculated, letter grades will be assigned based on your performance relative to the class in such a way that the average grade for the course is likely to be a B−.

Make-up Exams: Make-up midterm exams will not be given. If you miss a midterm exam because of extraordinary circumstances, such as a serious illness or family emergency, and document the circumstances, then you may substitute your final exam score for the missed exam.

Late Homework: Late homework assignments and computer labs will not be accepted. Other accommodations will be made only under extraordinary circumstances. Please understand that accepting late work in less extreme cases is unfair to other students. (Exception: to accommodate students who join the course a few days into the quarter, Lab 1 will be accepted up to 4 days late, for a 1-point penalty.)

Suggestions: Below are some suggestions that I hope will help you to succeed in this course.

1. Spend sufficient time on the course. According to the policy of UCSD's Academic Senate, "The value of a course in units ... shall be reckoned at the rate of one unit for three hours' work per week per quarter on the part of the student." You will receive a total of 5 credits for Math 11 and Math 11L, so you should expect to spend 15 hours per week on the course.

2. Keep up with the homework, and turn in all homework and lab assignments. Missing a homework assignment or a computer lab assignment will hurt your grade because no homework or computer lab scores will be dropped. It is impossible to get an A and difficult to get a B in Math 11L if you skip one of the labs, and skipping more than two will almost certainly lead to a failing grade. This policy is designed to encourage students to complete all the assignments and reward those who do.

3. Get started on the computer lab assignments before your Tuesday lab section. This will enable you to make the most of your section time by coming prepared with specific questions.

4. Try doing odd-numbered problems before even-numbered homework problems. Most even-numbered problems are similar to the preceding problem, so if you are stuck on problem 24, try problem 23, and check your answer against the back of the book.

5. After your homework is returned to you, check your answers against the solutions posted on the course web page to make sure you are approaching the problems correctly.

Math 11/11L, Academic Integrity Policy

It is essential that all students adhere to the UCSD Policy on Integrity of Scholarship. Cases of academic dishonesty will be reported to the Academic Integrity Coordinator. Students are expected to obey the following rules:

Exams: On exams, you will be allowed to use a calculator, but you will not be permitted to use any books or notes. All devices that can be used for communication or internet access must be put away and out of view during the exam.

Homework and Computer Labs: You may consult other students, the instructor, or TAs while working on homework assignments. However, the following rules apply:

1. You must write your final homework and lab solutions independently and may not copy solutions from another student or from any other source.

2. If you consult any sources other than your textbook or discuss the problems with anyone other than the instructor or TA, you must acknowledge this on your homework or lab.

3. Your lab write-ups must be based on calculations that you carried out in Minitab yourself. Never send your Minitab graphs, or the text of your lab solutions, to another student.

4. You may look at old exams posted on the course web page, but you may not look at other materials (such as homework or computer lab solutions) from previous Math 11 classes.

5. You may look up general course topics on the internet, but you may not look for solutions to specific homework problems on the internet.

6. You may not look at the Instructor's Edition of the textbook, or any other source (besides the course page in TED) containing answers to even-numbered problems in the textbook.

7. You may not discuss the online homework with other students after you have submitted your responses and received feedback.

Plagiarism Detection: To ensure that students will not copy portions of their labs from other students, we will be using the software Turnitin.com to detect plagiarism. Therefore:

"Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site."[1]

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[1]Taken from UCSD's Academic Integrity website at http://blink.ucsd.edu/instructors/integrity/turnitin.html