Syllabus for MATH 3070, Section 1  
Applied Statistics  
Fall 2014

Lecture: M,W,F 9:40–10:30AM, BEH S 114

Instructor: Greg Rice

Office: JWB 115  
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Web Page: http://math.utah.edu/~rice/Math_3070  
Office Hours: M, 10:30-11:30AM, T, 2:00-3:00PM.

Prerequisites: “C” or better in MATH 1220 OR MATH 1250 OR MATH 1270 OR AP Calculus BC score of at least 4. Roughly you should know the basic results from Calculus, in particular knowing how to compute definite/indefinite integrals, as well as iterated integration.


Note on Older Editions: I expect that the material in older versions of the text book will be roughly identical to that of the most recent version (the 8th one). However, what text book authors like to do is reorder/revamp the exercises from one edition to the next. Since I will be assigning homework out of the book this would be the biggest issue with buying an old text. Therefore, you can buy older editions of the text if you wish, however you should have access to the 8th edition to do your homework assignments.

Calculator: Students will need a scientific or graphing calculator for this course.

Withdrawals: The last day to withdraw from this course is Friday, October 24th.

ADA Statement: The University of Utah Mathematics Department seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the instructor and to the Center for Disability Services, 162 Olpin Union Bldg, 581-5020 (V/TDD) to make arrangements for accommodations. This information is available in an alternative format with prior notification.

Academic Dishonesty: Cheating in any form will not be tolerated and may result in a failing
grade for the relevant assignment or exam and/or a failing grade for the course. The guidelines in the Student Handbook will be followed.

**Attendance:** Regular attendance is highly encouraged, but is not required. In general, students who do not attend lecture tend to struggle, so be careful!

**Rough Course Outline:** This course is meant to be an introduction to mathematical/applied statistics. Roughly, we will cover the following topics: basic probability theory, sampling from normal populations, large-sample problems, sampling from one or two populations, estimation of population parameters, and hypothesis testing.

**Homework and Quizzes:** Homework will be assigned regularly during lectures. Typically you will have between one week or two weeks to complete homework assignments, and they are due by 5 pm in my box on the due date. Late homework will not be accepted, but instead I will drop your lowest homework score. There will be a 15-20 minute Quiz every Monday, unless we have a midterm exam scheduled during the week or holiday. You cannot makeup quizzes that you miss for any reason; in lieu of this I will drop your two lowest quiz scores when I formulate the final grades (i.e. you can miss two quizzes for free). Quizzes can be taken outside of class under certain circumstances and when they are scheduled before the date of the quiz.

**Lab:** There is a required computer lab for this course where you will be learning how to use R, a programming language which is primarily used for statistics. The lab meets for two hours each week, during which you will work through statistical exercises using R. Diligent workers typically finish the exercises during the allotted time, and therefore do not have to take programming work home. If you do not pass the lab section according to the syllabus of the lab instructor, you will not pass the course (i.e. you will receive a final grade of an E or an incomplete).

**Midterm Exams:** There will be two midterm exams. They are scheduled for Friday, September 26th and Monday, November 3rd. Make-up midterms will only be administered to students who have notified me of a conflict by Friday, May 24th or under extreme circumstances.

**Final Exam:** The final exam will be a comprehensive exam. The exam is scheduled for Thursday, December 18th, from 8:00-10:00AM. This exam will not be rescheduled unless it is unavoidable (don’t buy your plane tickets too early!).

**Grades:** Your grade will be determined as follows;

Homework: 10% Quizzes: 10% Lab: 10% Two Midterm Exams: 40% Final: 30%

A: $\geq 90\%$ B: $\geq 80\%$ C: $\geq 70\%$ D,F otherwise; I might give out pluses and minuses...