

STA248: STATISTICS FOR COMPUTER SCIENCE

Yanbo Tang

Summer, 2019

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Office Hours: M 4-6pm, W 4-6pm

Office: SS623B (Stats Aid Center)

Class Hours: M/W 6:10-9pm

Class Room: LM162

Course Description

A survey of statistical methodology with emphasis on data analysis and applications. The topics covered include descriptive statistics, data collection and the design of experiments, univariate and multivariate design, tests of significance and confidence intervals, power, multiple regression and the analysis of variance, and count data. Students learn to use a statistical computer package as part of the course.

Textbook

The primary textbook used will be: Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences, 4th edition by J. Susan Milton and Jesse C. Arnold. We will be covering material from chapters 6 through 11, 13, and 15.

We will sometimes refer to: Openintro 3rd Edition, free textbook found at: www.openintro.org/. We will mostly use materials found in chapter 4- 7.

Evaluation

There will be two assignments, one midterm and one final as part of the evaluation scheme for this class, the time and weight of each evaluation item will be given below:

	Weight	Date	Time
Assignment 1	5%	July 17th	Due beginning of class
Assignment 2	5%	August 7th	Due beginning of class
Midterm	30%	July 22nd	6:10-9pm
Final	60%	TBA	TBA

If you miss the midterm for a valid reason, you must submit the appropriate documentation within one week of the exam. The weight of the midterm will then be shifted to the final.

The assignments involves both theoretical questions and data analysis projects for which you will use the R programming environment, and will be submitted through crowdmark. Additional practice problems will also be assigned, but you will not be evaluated on these. If the test is missed for a valid reason, you must submit appropriate documentation within one week of the test and its weight will be shifted to the final exam.

15% of the total marks for an assignment will be deducted for each day it is late.

Email and Office hours

If you have any questions regarding the course material you are advised to come to office hours. Emails asking questions regarding the course material will not be answered. Besides the office hours listed on the syllabus, there will be additional office hours by TAs to be posted on Quercus.

Any administrative questions can be addressed by email.

Computing software

For some questions on the assignment you may be require to use R. It can also be downloaded free-of-charge at: www.r-project.org You are also encouraged to try out Rstudio, a companion software which makes R much more user friendly available at: www.rstudio.com