

Course: STAT 700: Applied Statistics I
Class Time: 8.00-9.15 TR in 201A LeConte
Prerequisite: a good knowledge of high school algebra
Instructor: Joshua M. Tebbs, Department of Statistics
Office: 209F LeConte (tel: 777-5163)
Office Hours: 1.00-2.00 MTWR (or by appointment)
email: tebbs@stat.sc.edu
url: <http://www.stat.sc.edu/~tebbs/index.htm>

Required Course Material:

- Moore, D. and McCabe, G. *Introduction to the Practice of Statistics*, Fifth Edition. Copyright 2006, by Freeman Press.

Objectives: The purpose of this course is to give you an introduction to statistical techniques used in the analysis of simple experiments and observational studies. This course is a must for anyone who works with data or whose field involves experimentation. The material presented here will not only serve as a basis for the subsequent course, STAT 701 *Applied Statistics II*, but is also extremely useful and fascinating in its own right. In particular, we will explore such topics as descriptive statistics (e.g., means, medians, standard deviations, percentiles, etc.), principles of experimental design, basic probability, random variables, sampling distributions, confidence intervals and hypothesis tests for population parameters (e.g., means, variances, proportions, etc.), correlation, and simple linear regression. Upon successful completion of this course, you should understand the importance of sound statistical methods when making decisions.

Exams: We will have two in-class midterm examinations on Thursday, September 29 and Thursday, November 17. An in-class final is on Tuesday, December 6 at 9.00am. All exams will be closed-book. However, I will let you use one 8.5×11 sheet of handwritten notes for each midterm, and two 8.5×11 sheets of handwritten notes for the final. Please note that I do not give make-up examinations.

Quizzes: I plan to give announced and unannounced quizzes during the semester. Quizzes will most likely be closed-book and closed-notes. No make-up quizzes will be given, and each will count towards your final grade.

Homework Assignments: There will be 8-12 homework assignments throughout the semester. Homework will be assigned, but it will not be collected or graded. However, I strongly recommend that you work all problems that I assign (and others from the text as well). This will prepare you for my exams and quizzes.

Grade Breakdown: Your course grade will be based on your performance on midterm examinations (25 percent each), quizzes and class participation (15 percent), and the final examination (35 percent). Final course grades will likely be assigned according to a 85-75-60-50 protocol. Grades of B+, C+ and D+ may be used sparingly.

Some comments about STAT 700:

- I expect you to attend each class session as we will cover a lot of material! Contact me (by email) if you need to miss class for any reason.
- Classroom discussions will follow course notes which I provide; these notes closely follow the text. Feel free to ask questions during class; your questions are an important part of this course.
- Introductory level courses like STAT 700 usually are challenging, and most students are unable to master the material without keeping up on a regular basis. If you do fall behind, it is easy to become confused and bored with the material.
- See me if you have a question about finding private tutors for the course.
- I would like to talk to anybody with a disability that may require special attention with examinations or other aspects of the course. Please come talk to me after class the first day.
- Plagiarism, copying, and cheating are grounds for failing the course. For more information, see the Student Affairs Policy STAF 6.25 (available online). If you have any questions, please see me.
- Working together on homework is permitted and encouraged, but each student should write up and submit his/her own work independently of others.
- I hope that you have an enjoyable and successful semester. *Good luck!!*