STAT 515, Honors Section, Statistical Methods I -- Fall 2010

Instructor:

David Hitchcock, assistant professor of statistics 209A LeConte College Phone: 777-5346 Email: hitchcock@stat.sc.edu Course Web Page: http://www.stat.sc.edu/~hitchcock/stat515honors.html (Also accessible via Blackboard)

Classes:

Meeting Times: MWF 1:25 p.m.- 2:15 p.m., BA Building, Room 351

Office Hours:

Mon 11:00 a.m.-12:00, Tues 10:00-11:00 a.m., Wed 11:00 a.m.-12:00, Thu 10:00-11:00 a.m., Fri 10:30-11:30 a.m., or **please feel free** to make an appointment to see me at other times.

Textbook:

Statistics (11th Edition), by J.T. McClave and T. Sincich, Prentice Hall, 2009. (Earlier editions are OK as well.)

Course Outline: Chapters 1 - 11 and 13 of the McClave & Sincich textbook. Topics covered include: descriptive statistics, elementary probability, sampling distributions, estimation, hypothesis testing, simple linear regression, and contingency tables.

Homework:

Homework exercises from the textbook will be assigned on the course web page. Due dates will be posted given on the course web page. Late homework will be penalized.

You must do each homework problem independently. You may ask me for help on the homework problems. If homework is found to have been copied, all students involved will receive a 0.

Everyone is expected to do every problem. Please write up homework papers neatly and clearly. Many problems on the exams will be similar to homework problems.

Exams:

There will be two in-class midterm exams (September 29 and November 10) and a final exam on December 11. Exams may not normally be made up, except in extreme circumstances, for which written documentation of excuse (doctor's note, funeral notice, etc.) is required. If you suspect you may miss an exam day, it is important to contact me well in advance of the test date.

Project:

There will also be two projects involving collecting and analyzing a data set using the techniques learned in the course. The details of the projects will be handed out in class. You are encouraged to work in teams of up to three people per team on the projects.

Grading:

The course grade will be based on homework/quizzes (20%), project grade (15%), 2 midterm exams (20% each), and a final exam (25%). The overall course average will result in the following grades: 90-100 = A, 87-89 = B+, 80-86 = B, 77-79 = C+, 70-76 = C, 67-69 = D+, 60-66 = D, 59 and below = F.

Computing:

Some problems in this course involve significant computations, and for these, we will learn to use the statistical software R Commander. You can download R and install R Commander for free; instructions are given on the course web page.

For statistics majors, SAS is also an important software package. For some analyses, we will get a glimpse of using SAS and how it compares to R Commander. In many industries and jobs, SAS is the standard statistical computing package used, and this course will introduce you to some common SAS procedures.

Tentative Course Schedule: MWF, August 20 through December 3, except:

No class (Labor Day): Sept. 6 (Monday) No class (Fall Break): Oct. 15 (Friday) No class (Thanksgiving): Nov. 24, 26 (Wednesday, Friday)

September 29: Exam 1 November 10: Exam 2 Saturday, December 11 (2:00 p.m.): final exam