Instructor: Joshua M. Tebbs, Professor, Department of Statistics Class Time: 12:00-12:50pm MWF Class Location: Gambrell 153 Office: LeConte 217 (tel: 803-576-8765) Office hours: 8:45-9:30am and 10:45-11:30am MWF; open-door policy all other times email: tebbs@stat.sc.edu www: http://people.stat.sc.edu/tebbs

## Required Material:

• Moore, D. and Notz, W. (2020). *Statistics: Concepts and Controversies*, 10th Edition. W.H. Freeman and Company, MacMillan Learning, Austin.

**Course Overview:** This is an introductory course presenting statistical concepts that we encounter in everyday life. This course is more conceptual than it is mathematical. A major thrust is to teach you how to be good consumers of information and data. We will cover the following chapters in Moore and Notz:

- Chapters 1-5: Populations and samples, parameters and statistics, observational studies and experiments, sampling designs, sample surveys, real-world implementation
- **Chapters 6-11:** Clinical trials, experimental design, data ethics, misuse of statistics, measurement, graphical displays
- Chapters 12-15: Summary statistics, population distributions (e.g., normal, etc.), statistical inference, correlation, regression
- Chapters 17-18, 21: Probability, confidence intervals.

We may cover additional topics from Chapters 19-20 and 22-24 if time permits. We will not cover Chapter 16.

**Course Notes:** We will follow my course notes during lecture. These notes are posted on my STAT 110 course homepage (can link to from my homepage). Most students like having my notes with them in class so they can write additional comments on them. They are organized by the chapters in Moore and Notz.

**Computing:** We will use the statistical software package R in class. It is OK if you do not know R (or have never heard of it), because you can learn it by example. The R package is available for free at www.r-project.org; the latest version is R 4.3.2 (2022-10-31, Eye Holes). The "An Introduction to R" manual available at this site is an excellent resource.

**Exam Schedule:** We will have three in-class midterm examinations:

- Exam 1: Wednesday, February 7, 12:00-12:50pm
- Exam 2: Wednesday, March 13, 12:00-12:50pm

• Exam 3: Wednesday, April 10, 12:00-12:50pm.

We will have a cumulative final examination on Wednesday, April 24 at 12:30-2:30pm. There are no "exemptions" from my final exam. All of my exams are closed-book and closed-notes. I do not allow formula sheets. I do not give make-up examinations unless your absence is due to a university function, you have given me appropriate documentation, and you have discussed it with me at least one week in advance (i.e., at least 168 hours before the exam starts). I will give make-up exams to members of our United States military in the event of a state or national emergency that requires their involvement.

Course Grades: I will calculate your final course grades using both of these schedules:

- <u>Schedule 1</u>: Three midterms + Final exam, 25 percent each. Total = 100 percent.
- <u>Schedule 2</u>: Best 2 of 3 midterms (25 percent each) + Final exam (50 percent). Total = 100 percent.

I will then give you the best course percentage between the two schedules. Course grades will be assigned according to a 90-80-70-60 scale. I will use "+" grades at 88, 78, and 68.

**Disabilities:** Students with documented disabilities who need special accommodations with exams or other aspects of the course should contact the Student Disability Resource Center (Close-Hipp 102; ph: 803-777-6142). All examinations given through this office must run concurrently with the dates/times listed above.

Attendance/Classroom Management: I do not take attendance, but I want you to be here. I do not use the I-Clicker system, and I do not use Blackboard. Please turn off phones during class. I prefer that you not use laptops during class. I reserve the right to give in-class assignments or quizzes whose points may be used at my discretion.

## My expectations for you:

- 1. Attend every class and be on time. Being "on time" means being early (5-10 minutes).
- 2. Read/review appropriate sections of the notes before and after class. This helps greatly.
- 3. Spend time working on the problems I assign from the text. By doing this, you are essentially studying for exams.
- 4. Ask questions if you do not understand something or wish to know more. You can do this in class or in my office. In-class questions are important.

I have found that students who do these things generally earn the best grades (not only in STAT 110 but in all of their courses).

**Finally:** I am always happy to spend time with students answering questions about the course or about other topics. Please feel free to drop by my office and introduce yourself. I look forward to meeting all of you!