ST512: Statistics for Biological Sciences II  Spring 2018

INSTRUCTOR DATA.
Name: Dr. Ryan Martin
Office: SAS Hall 5238
Phone: 919-515-1920
Email: rgmarti3@ncsu.edu (best way to contact me)

COURSE DATA.
Prequisites: ST511
Textbook: Ott & Longnecker, Intro to Statistical Methods & Data Analysis, 7th Ed.
Software: SAS and some R, free for NCSU students
Meetings: Lectures — Tuesdays & Thursdays, 8:30–9:45am, Mann Hall 216
       Labs — Tuesdays, 11:45am–12:45pm, SAS Hall 1107 (001A)
           — Wednesdays, 8:30am–9:45am, SAS Hall 1107 (001C)
           — Wednesdays, 11:45am–1:00pm, SAS Hall 1107 (001D)
Lab asst.: Mr. Zhou Lan (zlan@ncsu.edu)
Grader: Mr. Weilian Zhou (wzhou11@ncsu.edu)
Office hours: with instructor, Tuesdays 1:30–2:30pm, or by appointment
            with lab assistant, TBD, SAS Hall 1101
            with grader, TBD, SAS Hall 1101
URL: http://www.stat.ncsu.edu/people/rmartin/courses/st512/

COURSE CONTENT. ST512 is an applied statistics course, following up on ST511, focusing mainly on designed experiments and the normal linear models commonly used to analyze these data. Specific topics include simple and multiple regression; analysis of variance; factorial, blocked, and split-plot designs; and mixed-effect models. More details can be found on the course website.

ASSIGNMENTS. There will be roughly 7 homework assignments, two midterm exams, and a cumulative final exam. The tentative dates for the midterm exams are Thursday, February 22nd and Thursday, April 5th; the final exam will be on Thursday, May 3rd, the day set by the university. Exams will be “closed-book” but a one-page sheet of handwritten notes is allowed for each midterm; two pages for the final.

GRADES. Homework is worth 20%, two midterm exams are worth 25% each, and the final exam is worth 30%. Grades will be assigned based on the rule:

\[
\begin{align*}
A+ & \geq 96 > A \geq 93 > A- \geq 90 \\
B+ & \geq 86 > B \geq 83 > B- \geq 80 \\
C+ & \geq 76 > C \geq 73 > C- \geq 70 \\
D+ & \geq 66 > D \geq 63 > D- \geq 60 > F.
\end{align*}
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The instructor reserves the right to make adjustments to the overall grading policy, but the letter grade cutoffs will be no stricter than those advertised above.
Lab Sessions. No one does statistical analyses by hand, so it is essential that students learn a statistical software program. In ST512, we will use the SAS program extensively, and also R from time to time. To learn SAS, or any software program for that matter, hands-on experience is essential. Towards this, the lab sessions focus primarily on helping students learn how to implement the various statistical methods discussed in lectures using SAS and read off the relevant output.

Miscellany.

- Attendance is expected at all lectures and lab sessions.
- No late homework assignments will be accepted, but the lowest homework score will be dropped.
- Disputes about homework/exam grading must be brought to the instructor’s attention within one week after the graded paper is returned.
- Students may discuss the homework problems with others. However, each student must submit their own independent write-up of the solutions. Copying someone else’s work—including on-line resources—is not acceptable and may result in disciplinary action. The instructor is committed to upholding the University policy on academic integrity, as described in the Code of Student Conduct.2
- Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students.34 Any student who feels they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss your specific needs.
- Students are responsible for reading, understanding, and adhering to the university’s policies, regulations, and rules.5

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1Even if SAS is not the software you prefer to use—it’s not my favorite—the output that SAS produces is similar to that of other statistical software packages, so learning SAS will indirectly help you become more proficient with other programs.

2http://policies.ncsu.edu/policy/pol-11-35-01
3http://www.ncsu.edu/provost/offices/affirm_action/dss/
4https://policies.ncsu.edu/regulation/reg-02-20-01
5https://policies.ncsu.edu