Instructor Data.

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Corequisites: MA405 (linear algebra) and MA425/511 (real analysis) 
Textbook: Casella & Berger, Statistical Inference, 2nd edition 
Software: We may occasionally use R (http://cran.r-project.org) 
Meetings: Lectures, MW 3:00–4:15pm in SAS Hall 1108  
Lab, M 4:30–5:20pm in SAS Hall 1108 
TA: Lin Su (lsu3@ncsu.edu) 
Office hours: with instructor, W 10:00–11:00am (tentative), or by appointment  
with teaching assistant, Th 1:30–2:30pm, in SAS Hall 1101 
URL: http://www.stat.ncsu.edu/people/rmartin/courses/st521/

Course Objectives. ST521 develops the probabilistic tools and language of mathematical statistics at an advanced calculus level. In particular, the course describes basic probability theory, probability models for and properties of random variables, common probability distributions for univariate and multivariate random variables, sampling distributions, and convergence theory. This is roughly Chapters 1–5 in the textbook.

Assignments. There will be about 10 homework assignments, two midterm exams, and a final exam. The tentative dates for the midterm exams are Monday, September 26th and Monday, November 7th; the final exam will be on Monday, December 12th, the day set by the university. The exams will be “closed-book” but a one-page sheet of handwritten notes will be permitted. The final exam will be cumulative.

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:

\[
\begin{align*}
A+ & \geq 96 > A \geq 93 > A- \geq 90 \\
B+ & \geq 86 > B \geq 83 > B- \geq 80 \\
C+ & \geq 76 > C \geq 73 > C- \geq 70 \\
D+ & \geq 66 > D \geq 63 > D- \geq 60 > F.
\end{align*}
\]

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. The labs will primarily be used for problem-solving sessions, but may also include some additional lectures, e.g., in case we fall behind schedule. The instructor will inform students of the plan for the lab sessions in advance, either in class or on the course website.

Miscellany.

- Attendance is expected at all lectures and lab sessions.
- In principle, no late homework will be accepted and no make-up exams will be given. Exceptions to this rule may be made if discussed with the instructor in advance.
- 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.¹
- 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.² 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.³

¹http://policies.ncsu.edu/policy/pol-11-35-01
²http://www.ncsu.edu/provost/offices/affirm_action/dss/
³https://policies.ncsu.edu/regulation/reg-02-20-01
⁴https://policies.ncsu.edu