Engineering Statistics
ISE 225, Spring 2016

**Contact Information**
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**Textbooks** Introduction to Probability and Statistics for Engineers and Scientists, fifth ed., Sheldon Ross, Academic Press, 2014

**Course Coverage**

1. Descriptive Statistics: Chapters 1 and 2
2. Normal Distribution: Chapter 5

   Chi-square, t, and F distributions
3. Sampling Statistics: Chapter 6
4. Parameter Estimation: Chapter 7
5. Hypothesis Testing: Chapter 8
6. Regression Analysis: Chapter 9
7. Analysis of Variance: Chapter 10

**Course Objectives** To understand how to represent uncertainty in terms of a probabilistic model and to then use data to make inferences about parameters of this model. In doing so, we study how to collect, analyze, and utilize data. Parameter estimation and hypothesis testing concepts will be learned.

**Grades** Based on
20 percent: Homeworks
40 percent Midterm
40 percent: Final exam

**Statement for Students with Disabilities**
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Website and contact information for DSP (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX)

**Statement on Academic Integrity** USC seeks to maintain an optimal learning environment. General Principles of academic honesty include the concept of respect for the intellectual prop- erty of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect ones own academic work from misuse by others as well as to avoid using anoth- ers work as ones own. All students are expected to understand and abide by these principles. Scampus, The Student Guidebook, contains the Stu- dent Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://usc.edu/dept/publications/SCAMPUS/gov/ Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review should there be any suspicion of academic dishonesty.

**Emergency Preparedness/Course Continuity in a Crisis**
In case of emergency, when travel to campus is difficult, if not impossible, USC executive leadership will announce a digital way for instructors to teach students in their residence halls or homes using a combination of the Blackboard LMS (Learning Management System), teleconferencing, and other technologies. Instructors should be prepared to assign students a Plan B project that can be completed at a distance.