

STAT 5104
Probability and Distribution Theory
Fall 2015

Instructor:

Name: Dr. Leanna House

Office: 417A Hutcheson Hall

Email: lhouse@vt.edu

Office Hours: Mondays from 3:00-4:00pm or by appointment, www.apps.stat.vt.edu/house/teaching.html. Typical times include: Wednesdays, 2:30-4:30pm and Fridays, 2:30-3:30pm.

Course Information:

Time: Monday, Wednesday, Friday, 10:10-11:00am

Location: 313 Seitz Hall

Final Exam: Wednesday, December 16, 2015 at 7:45-9:45am

Textbook(s): George Casella and Roger L. Berger (2002). *Statistical Inference*, Second Edition. Duxbury.

Website: See Scholar

Prerequisites: Multivariable and Advanced Calculus. If/when code is presented in class, it will be in R.

Goals:

Probability is the foundation upon which we statisticians rest to quantify uncertainty. Thus, in this class, we take time to truly understand the concept of probability, properties of probability, the use of probability distributions, and distribution theory. When possible and time allows, we will motivate what we learn by applications in applied fields. The concepts we will cover correspond to Chapters 1-5 of Casella and Berger.

Grading:

Grading will be based entirely on exams. We will have 2 or 3 exams and a comprehensive final on December 16th at 7:45am. This final will be worth 40% of your grade. The exams prior to the final will have equal weight, spread across 60%. They will take place at night, starting at 5:30pm. In a couple of weeks, I will have an idea of pace in the course and I will provide exam dates.

At the beginning of each lecture, I will “assign” homework problems, but I will not grade them. Solutions are readily available online. In fact, I provide a solutions manual for most problems in the textbook on Scholar (folder: resources/homework).

Academic Honesty:

The students are expected to abide by Virginia Tech’s Community Standard for all work for this course (<http://www.honorsystem.vt.edu/>). Violations of the Standard will result in a failing final grade for this course and will be reported to the Dean of Students for adjudication. Ignorance of what constitutes academic dishonesty is not a justifiable excuse for violations.

For exams, students are required to work alone and during the specified time period.

Changes to the Syllabus:

The instructor reserves the right to make changes to the syllabus during the course. Any necessary changes will be announced in class and posted on the course website.

Students:

As supported by Virginia Tech’s Principles of Community, all students will be treated equally (<http://www.vt.edu/diversity/principles-of-community.html>). Those with special needs can be accommodated easily. For specific questions, refer to <http://www.ssd.vt.edu/>.