

STA 4321 Sec 4442
STA 5325 Sec 8794

Introduction to Probability Fundamentals of Probability

Fall, 2008

Course Information

Time: MWF 8:30 – 9:20 a.m. (Period 2)

Location: Keene-Flint Hall (FLI) 105

Instructor: Dr. Brett Presnell

Office: 220 FLO

E-mail: presnell@stat.ufl.edu

Office Hours: See instructor's web page.

Phone: (352) 273-2989

Web Page: <http://www.stat.ufl.edu/~presnell/>

Text: Wackerly, Mendenhall, and Scheaffer, *Mathematical Statistics with Applications* (7th ed), Duxbury Press (Thomson Brooks/Cole Publishing), 2008.

Course Web Page: <http://www.stat.ufl.edu/~presnell/sta4321-2008f/>

Course Content and Objectives

The sequence of courses STA 4321–4322 (5325–5328) develops the basic mathematical theory of statistical inference at an undergraduate level. Three semesters of calculus are prerequisite for these courses. In the first course, STA 4321 (5325), the student is introduced to the ideas and methods of probability and distribution theory. In STA 4322 (5328), these tools are used to develop the theory of statistical estimation and hypothesis testing.

The topics covered in STA 4321 (5325) are contained in Chapters 1–7 of the course text and include: the basics of discrete probability; discrete and continuous random variables and their distributions, especially those distributions most commonly encountered in statistics; calculation of means, variances, and other expectations; moment generating functions; multivariate probability distributions; variances and covariances of linear combinations of random variables; methods for finding the distributions of functions of random variables; and the central limit theorem.

Course Policies

Grading

There will be two in-class exams (25% each) and a cumulative final exam (35%). In addition, there will be four short quizzes during the term. No make-ups of quizzes will be allowed under any circumstances, but the lowest quiz score will be dropped. The remaining quiz grades will determine 15% of the course grade. Course averages of at least 90%, 80%, and 70% will guarantee letter grades of A, B, and C, respectively.

Exam and Quiz Dates

	Day	Date
Quiz 1	Friday	Sept 5
Quiz 2	Friday	Sept 19
Exam 1	Friday	Oct 3
Quiz 3	Friday	Oct 17
Exam 2	Friday	Nov 7
Quiz 4	Friday	Nov 21
Final Exam	Monday	December 15 (7:30 – 9:30 a.m.)

Makeups

Since the lowest quiz will be dropped, there will be no makeups of quizzes. In case a student needs to be excused from an exam for non-emergency reasons, the student must make arrangements with the instructor well *before* the scheduled day of testing. Otherwise, a student will be allowed to make up a missed exam or make other arrangements to replace the missed portion of their grade *only* in case of an *documented* emergency or medical problem. Such arrangements must be made as soon after the exam as possible. In case of a medical problem, the student must present a letter from a *doctor* stating that the student was unable to take the exam. In particular, a note simply stating that the student visited the infirmary on the day in question will *not* be acceptable.

Homework Problems

In order to master the course material it is essential that the student work as many exercises as possible. Homework will not be collected, but suggested exercises will be posted on the course web page on a regular basis. Solving problems before each class meeting is critical to keeping up with the pace of the course. Most exam questions will be similar to examples from the lectures and to suggested homework problems. Some problems may require considerable effort, but this effort is an important part of the learning process that cannot be replaced with simply looking up the solutions in a solutions manual.