Math 323: Probability and Statistics
Spring 2019

3 credit hours · Section 1, CRN 20400
1:25–2:15 MWF in Ayres Hall 124

Instructor: Dr. David White
Office: Ayres Hall 248
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Web page: http://www.math.utk.edu/~davidwhite/323/index.html
Office hours: Mondays 10:30–1:20 PM, or by appointment

Course Description: Discrete and continuous random variables. Conditional probability, expectation, moment generating functions. Law of large numbers. Central limit theorem. Elements of statistical inference, estimation, and hypothesis testing.

Objectives: Upon completion of Math 323, students should be able to apply the basic tools of probability to novel problems, and to understand uses of statistical inference.

Prerequisites: Math 241 or 247; Math 300 or 307.

Text: *Introduction to Probability, second edition*, by Bertsekas & Tsitsiklis.

Homework & Quizzes: Homework and reading will be assigned each class period. Assignments and due dates are posted on the class web page. Homework will be collected and graded based on completion, and there will be frequent quizzes over the problems and reading. Quizzes will be given during the first ten to fifteen minutes of class, so please arrive on time.

Tests: There will be two tests during the semester and a cumulative final exam. The tests are tentatively scheduled for Monday, February 18 and Friday, April 5. The cumulative final is 12:30–2:30 PM, Monday, May 6.

Course requirements, assessments and evaluations: Students are expected to attend each class and are responsible for all material covered. Students should attempt all assigned homework problems and be prepared to discuss problems in class.

The quizzes and homework will comprise 15% of your grade, each midterm 25%, and the final 35%. Cut-offs for grades of A, B, C, and D will be 90%, 80%, 70%, and 60%, respectively. Pluses and minuses will be given at the discretion of the instructor.

Make-up policy: The two lowest quiz grades will be dropped. In the event that a student misses an exam, the final exam score will be substituted. No extra credit is possible.

Tentative course schedule: We will cover topics at a rate of roughly one book section per class meeting. We'll finish chapters 1 and 2 for exam 1; chapter 3, part of chapter 4, and chapter 5 for exam 2; and chapter 9 before final exam.

Important Dates:

Exam 1	February 18
Exam 2	April 5
Spring Break	March 18–22
Final exam	Monday, May 6, 12:30–2:30 PM

University Syllabus: For information that is common to all UT courses, including civility, academic integrity, disability accommodations, please see
http://www.math.utk.edu/~davidwhite/323-Spring2019/pdf/UT_syllabus_2018-19.pdf.