# Introduction to Probability STA 4321 Fall 2024

#### **Instructor:**

J. P. Hobert

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Class: T: 10:40-11:30am & R: 9:35-11:30am in Griffin Floyd Hall 100

**Office Hours:** R: 1:00-2:15pm & F: 2:30-3:45pm

### Course Web Page:

http://web.stat.ufl.edu/~jhobert/sta4321.html

### Required Text:

7th edition of Mathematical Statistics with Applications by Wackerly, Mendenhall, and Scheaffer

## Prerequisites:

The prerequisite for this course is MAC 2313 (or MAC 3474) with a minimum grade of C.

## Objective:

The objective is to introduce the students to the theory of probability. In particular, we will study counting rules, conditional probability, independence, additive and multiplicative laws, and Bayes rule. This is followed by a study of discrete and continuous random variables, their distributions, moments and moment generating functions, multivariate probability distributions, independence, covariance, distributions of functions of random variables, sampling distributions, and the central limit theorem.

### Course Schedule:

We will cover the first 7 chapters of the textbook, spending approximately 6 lectures on each chapter.

#### Class Attendance and Make-up Exams:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

#### Students with Disabilities:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://disability.ufl.edu/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

#### Exams:

Three exams will each count for 30% of the final grade. The first two exams are tentatively scheduled for September 19 & October 24. The third exam will be during the scheduled final exam time: December 10 from 3:00-5:00pm.

## **Grading:**

The usual 10 point scale (90% for an  $\mathbf{A}$ , 80% for a  $\mathbf{B}$ , ...) is tentatively adopted, but will most likely be loosened. Information on current University of Florida grading policies for assigning grade points is given at:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

#### Teaching Assistant:

The Teaching Assistant for the course will be Cheng Zeng. (Office: 218 Griffin Floyd Hall, Email: czeng1@ufl.edu). Cheng will hold Zoom office hours from 2:00-4:00pm every Tuesday and in-person office hours from 2:00-4:00pm every Wednesday.

## Homework:

Mastery of the material presented in this course requires a great deal of practice. Several homework assignments will be assigned throughout the semester. Homework will usually be assigned on a Thursday and will usually be due a week after it is assigned. Homework is worth 10% of the final grade. No late homework will be accepted.

#### **Course Evaluation Process:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.