STA 4321 Sect. 4442/ STA 5325 Sect. 4443
Introduction to Probability MWF 2nd period, 8:30am - 9:20am

Instructor Deborah Burr, 116C Griffin-Floyd Hall (FLO); Zoom id, see course website; Office Hours: MW 2:45pm - 3:45pm, or by appointment; Email: `burr@stat.ufl.edu` (put "STA 4321" in the subject line).

Teaching Assistant Maoran Xu; Office Hours: Thursday 3pm-5pm by zoom at `https://ufl.zoom.us/j/7649808097`; Email `maoranxu@ufl.edu`

Online Course Site: `elearning.ufl.edu`

Course Communication

You may ask short questions about course content right after class. Coming to office hour is the preferred way to ask the instructor or TA questions about the course content. Review lectures before coming to office hour, and be prepared with clear questions.

Use e-mail for administrative matters only (Use my UF email address; put "STA 4321" in the Subject line)

Do not send me e-mail in Canvas; I do not check Canvas e-mail.

Required Materials

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

Scientific Calculator Some test questions may require use of a calculator (although I will try to make the questions doable "by hand").

Prerequisite MAC 2313 (or equivalent third semester calculus course).

Course Description The sequence of courses STA 4321-4322 (5325-5328) provides a formal and systematic introduction to probability and mathematical statistics for students who have passed three semesters of standard undergraduate level calculus. STA 4321/5325 introduces the background in probability that is necessary to understand the classical statistical theory introduced in STA 4322/5328.

Course Content (in brief) Introduction to the theory of probability, counting rules, conditional probability, independence, additive and multiplicative laws, Bayes Rule. 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, central limit theorem.

Grading Your final course grade will depend on your course score based on the following five components with their respective weights:

Homeworks/Quizzes:		20%
Midterm #1	Wed Sept 22	20%
Midterm #2	Mon Oct 25	20%
Midterm #3	Fri Nov 19	20%
Midterm #4	Mon Dec 6	20%

The midterms will be in-class tests. The above dates are tentative and may have to be changed. The scheduled final exam period for this class is Friday December 17 10:00am-12:00noon and will be used for make-up exams if a student has a valid academic or medically excused reason for missing a midterm.

The assignment of letter grades will be determined as follows (cutoffs will be no stricter than indicated, and may be relaxed): A 93–100; A$^-$ 90–92.9; B$^+$ 87–89.9; B 82–86.9; B$^-$ 79–81.9; C$^+$ 76–78.9; C 70–75.9; C$^-$ 67–69.9; D$^+$ 64–66.9; D 60–63.9; D$^-$ 55–59.9; F $<$ 55

Homework Homework is crucial in learning any mathematics subject. Homeworks on the lecture topics will be assigned weekly. A subset of the problems will be graded. Solutions will be posted to all homework questions during the week after the homework is due; students are responsible for all homework questions, graded and ungraded, on the exams. A crucial part of homework assignments is to show your work and explain your reasoning. It is not sufficient to simply give a numerical or short answer.

Course Policies

Homework You are allowed to get help with homework problems, but your final write-up must be your own. Homework must be submitted on Canvas by the posted due date and time. Late homework will not be accepted.

Email Use email only for administrative matters. Email me at `burr@stat.ufl.edu`, and put the course number in the subject line. See me or a TA in person for content questions. The ideal time to ask questions is during office hour.

Honor Code You may discuss homeworks with other students, with the TA, or with the instructor. You are expected to demonstrate your own understanding of the question by producing a written response in your own words; **your final write-up must be your own work**. All work on exams must be entirely your own. Refer to the UF Honor Code at `http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode/`.

Disabilities Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, `www.dso.ufl.edu/drc/`) 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.

Course Evaluations 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 `http://gatorevals.aa.ufl.edu/students/`. Students will be notified when the evaluation period opens (usually near the end of the semester), and can complete evaluations through the email they receive from GatorEvals, or in their Canvas course menu under GatorEvals. Summaries of course evaluation results are available to students at `http://gatorevals.aa.ufl.edu/public-results/`.