STA 7467 **Probability Theory - II** **Spring, 2026**

Course Information:

Time: Tue 1:55- 3:50 p.m. (FLO 0230); Thu 8:30-9:20 a.m. (FLO 0100).

Instructor: Sohom Bhattacharya

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Office Hours: (might change occasionally) Wed 4-6 p.m.

Objective:

The two-semester sequence STA 7466–7467 covers material from measure, integration, and probability theory that every statistics doctoral student should know. This includes a rigorous development of measure theory and Lebesgue integration, independence, modes of convergence of random variables, convergence of series of independent random variables, weak and strong laws of large numbers, characteristic functions, the central limit theorem, conditional expectation, basic martingale theory, and the Wiener process (a.k.a., Brownian motion). Other topics will be introduced as time permits.

Prerequisite:

STA 7466.

Recommended Text:

- Billingsley (1995). Probability and Measure (3rd ed). Wiley, New York.

Course Website:

Canvas course page.

Grading:

Attendance will account for 5% of the course grade. Each student is allowed up to three unexcused absences; any additional absences will be excused only if they are documented and conform to the attendance policies of the Graduate School as described in the Graduate Catalog. If you know that you will have to miss class for an excused reason, please inform the instructor in advance of your absence. Homework will be collected regularly throughout the term and will determine 35% of the course grade. Late homework will not be accepted. There will be three in-class exams, each accounting for 20% of the course grade. Make up exams will be given only in case of an excused absence. All exams will be in-class. No books, notes, or other reference materials will be allowed during the exams.

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 https://gatorevals.aa.ufl.edu/students/.

Academic Integrity

Please familiarize yourself with the Student Honor Code and Academic Honesty Guidelines outlined in your University of Florida Student Guide at `http://www.dso.ufl.edu/sccr/honorcode.php`.