

ENG EC381
Probability Theory in Electrical and Computer Engineering

Course Information

Time and place: Tue-Thu 10:00 a.m. to noon, at PHO201.

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Teaching assistant: Yuting Zhang. Office: PHO 424. Email: ytzhang@bu.edu

Description: This course is an introduction to modeling and analysis of uncertainty in electrical and computer systems. The course covers basic concepts of probability and its applications, analysis tools and probability models that are commonly used in engineering applications, and basic detection and estimation procedures.

Prerequisites: CAS MA225 or equivalent.

Office Hours: Regular office hours are Wed 15:00-17:00, in PHO 439. Other time slots are also available and will be arranged via appointment.

Textbook: *Probability and Stochastic Processes: A Friendly Introduction for Electrical and Computer Engineers*, 2nd Ed., by R. Yates and D. Goodman, Wiley, 2005.

Grading: Homework: 10%, Midterm 1: 30%, Midterm 2: 30%, Final: 30%. Homework assignments will be given roughly every week. Midterms will be held in class and they are tentatively scheduled on October 8 and November 12.

Miscellaneous policies:

- Collaboration in homework assignments is allowed provided that you write your own answers and indicate your collaborator(s) for each question. Some assignments may require numerical experimentation with MATLAB. Registered students have card access to the Signet Lab PHO307.
- Homework assignments and related announcements will be posted on CourseInfo. Solutions of homework problems will be posted at 5:00 p.m. on the due date. To receive credit, assignments should be handed in before their solutions are posted.
- Exams will be closed-book except that you can bring one page of handwritten notes (A4, double-sided) to the first exam, two such pages to the second exam, and three pages to the final exam.
- There will be no make-up exams. If you miss an exam for a legitimate reason such as a documented illness, existing exam scores will be renormalized to compensate for the missing exam.