

ECE 313: Probability with Engineering Applications. Spring 1999

Class meeting times: Section C 10 MWF 245 Everitt Lab
Section D 11 MWF 260 Everitt Lab

Note: This semester, there is also a Section R (1 – 2:20 TuTh), which will follow a slightly different syllabus. Section R places special emphasis on applications to computer engineering problems, especially in system performance evaluation. **None** of the following applies to Section R.

Prerequisite: ECE 210
A good understanding of the fundamentals of differential and integral calculus, functions of several variables, multiple integrals, etc. is assumed. On the other hand, we will not need stuff like vector calculus, gradients, Green's theorem etc.

Instructor: Professor Dilip V. Sarwate 109 C&SRL Bldg 333-7473
326B Everitt Lab 333-0387

Electronic mail: sarwate@uiuc.edu

Office Hours: Tuesdays 1:30 pm – 4:30 pm in 326B Everitt Lab
At other times, I am *usually* in my C&SRL office from 8:30 a.m. to 4:00 p.m. and am *usually* available to discuss course-related matters without the formality of making an appointment. However, you might save yourself a walk by first sending e-mail or by calling me at 333-7473 to make sure that I will not be busy with other matters when you plan on coming over.

Teaching Assistant: Zukui Song 321 Everitt Lab 333-4208

Electronic mail: zsong@uiuc.edu

Office Hours: To be announced, but probably on Tuesday afternoons

Textbook: S. Ross, *A First Course in Probability* (Fifth edition), Prentice-Hall, 1997.

Optional Reading: D. V. Sarwate, *Probability with Engineering Applications*, Lecture Notes for ECE 313, Fall 1997. (Available for sale through the IEEE Student Branch Office in 54 Everitt Laboratory)

Books on reserve in Grainger Engineering Library:

C. Ash, *A Probability Tutoring Book*, IEEE Press, 1992.

H. P. Hsu, *Probability, Random Variables & Random Processes*, McGraw-Hill 1997.

S. Ross, *Introduction to Probability and Statistics for Engineers and Scientists*, Wiley 1987.

R. E. Walpole and R. H. Myers, *Probability and Statistics for Engineers and Scientists*, (Fifth edition) Prentice-Hall 1993.

Reference Material: (Ask at the REFERENCE desk, not the Reserve Desk, of Grainger for this book)

M. Abramowitz and I. A. Stegun, *Handbook of Mathematical Functions*, National Bureau of Standards, 1964; also Dover Press, 1965.

Communications: All students who advance enrolled in ECE 313 (MWF sections) have been added to the ECE 313 automated mailing list, and should have received a welcoming message. Students who registered more recently should subscribe to the mailing list by sending an e-mail message to majordomo@csl.uiuc.edu with the single line

subscribe ece313

or

subscribe ece313 yourname@your_preferred_e-mail_address

in the **body** (not the subject line) of the message.

The home page for ECE 313 Sections C and D has URL <http://www.ece.uiuc.edu/~ece313/>
A copy of this information sheet is available on the home page for the convenience of those who mislay such items.

E-mail addressed to the instructor or TA (rather than telephone calls) should be used for simple specific questions on classwork or homework, as well as for setting up appointments outside office hours, etc.

The newsgroup *uiuc.class.ece313* is available for class related discussions. Class-related information will be posted there from time to time. However, news-servers delete postings after a few days, so these may disappear after a few days.

Homework: Homework will be handed out on Wednesdays, and will be due in class on Wednesday of the following week **at the beginning of the class period**. Homework turned in late will not be accepted for academic credit. Solutions to the homework will be distributed in class on Fridays. Solutions will also be posted to the class home page. If you prefer to get the Solutions off the home page, please let me know so that I can adjust the number of printed copies accordingly, and save a few trees.

Examinations: Hour Exam I Wednesday March 3 7:00 p.m. – 8:00 p.m. 269 Everitt Laboratory
Hour Exam II Wednesday April 14 7:00 p.m. – 8:00 p.m. 269 Everitt Laboratory

One $8\frac{1}{2}$ " $\times$ 11" sheet of notes is permitted (you may use both sides); but the examinations are closed book otherwise. Calculators, laptop computers, tables of integrals, etc. are neither necessary nor permitted.

In order to satisfy University requirements that classes be cancelled to compensate for evening hour exams, ECE 313 will not meet on Friday March 5 and Wednesday April 7.

Final Examination: The date, time and place of the Final Examination will be announced later. **Two $8\frac{1}{2}$ " $\times$ 11" sheets of notes are permitted on the final examination (you may use both sides);** but the examination is closed book otherwise. Calculators, laptop computers, tables of integrals, etc. are neither necessary nor permitted.

Grades: Scores on homework and examinations will be weighted as shown below in determining your grade in this course.

15% Homework
20% Each Hour Examination
45% Final Examination

You can check your class standing via the Campus Gradebook. You will need your Network ID and password. If you are unfamiliar with this program, visit <http://www.uiuc.edu/resources.html> for more information.