ECE 313: Probability with Engineering Applications. Summer 2003

Class meeting times: 12-1 MTuWThF 245 Everitt Lab

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: Orhan C. Imer 160 Coordinated Science Lab 244-6119

Electronic mail: `imer@uiuc.edu`

Office Hours: Wednesdays 4:00 pm – 5:30 pm (160 CSL)

Textbook: S. Ross, *A First Course in Probability* (Sixth edition), Prentice-Hall, 2001.

Optional Reading: D. V. Sarwate, *Probability with Engineering Applications,*
Lecture Notes for ECE 313, Fall 1997. (Available on the class web page)

D. V. Sarwate, *Probability with Engineering Applications,*
Powerpoint slides for ECE 313, Fall 2000. (Available on the class web page)

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, *A First Course in Probability* (Sixth edition), Prentice-Hall, 2001.

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: The newsgroup `uiuc.class.ece313` is available for class-related discussions. Class information will be posted in the newsgroup from time to time. I will check the newsgroup from time to time for urgent messages, but the newsgroup is mainly intended for class-related discussions among students.

A more permanent source of information about ECE 313 is the main home page for ECE 313 at

`http://courses.ece.uiuc.edu/ece313/`

Please read the ECE 313 FAQ at this site. Links from this page will lead you to this semester's web page which has detailed information about this semester's offering — for example, a copy of this information sheet will be posted there for the convenience of those who mislay such items. The class web page can also be accessed directly at

`http://courses.ece.uiuc.edu/ece313/summer03`

You can also follow links from the main ECE 313 home page to the home pages for ECE 313 offerings during previous semesters. These old web pages contain a wealth of homework and exam materials that you may find useful in studying for the course during the semester.

Homework: Homework will be **assigned** on **Thursdays** (*with the exception of the first homework which is due this Thursday*), and will be **due** in class on **Thursday** 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. Problem Sets and Solutions will also be posted to the class home page.

Examinations: In-class Hour Exams will be held on Tuesday July 8 and Monday July 28. *One* $8\frac{1}{2}''\infty 11''$ *sheet of notes is permitted (you may use both sides);* but the examinations are closed book otherwise. Calculators, tables of integrals, laptop computers, PDAs, cellphones, wireless pagers, etc. are neither necessary nor permitted.

Final Examination: A two-hour Final Exam will be held at 8am, Thursday August 7; place of the Final

Examination will be announced later. ***Two*** *$8\frac{1}{2}$"∞11" sheets of notes are permitted on the final examination (you may use both sides);* but the examination is closed book otherwise. Calculators, tables of integrals, laptop computers, PDAs, cellphones, wireless pagers, 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. Gradebook clients are installed on most CCSO PCs and Macintoshes. Visit

`http://www.uiuc.edu/ccso/gradebook`

for more information about the Campus Gradebook or to download a Gradebook client application to your personal PC or Macintosh computer. Web browsers capable of secure communication can be used to view Gradebook information (subject to some delay and some loss of functionality.) More information can be found at `https://gradebook.cso.uiuc.edu/SWA`