

MAT 526 – Probability - Spring 2011

Course Description. This is a first course in stochastic processes. Topics to be covered include: random walks, branching processes, Markov chains, the Poisson process and queuing theory (time permitting).

Prerequisite. MAT 521, MAT 397

Instructor. Prof. JT Cox, 213B Carnegie, jtcox@syr.edu, 443-1488

Class Time and Location. MWF 9:30-10:25, Carnegie 219

Office Hours. held in **Carnegie 213B**

- Tuesday 10:00-11:30
- Friday 1:00-2:30
- At other times by appointment

Text. An Introduction to Stochastic Modeling, 3rd edition, by Taylor and Karlin

Course Webpage. <http://jtcox.info> (click on Teaching). All assignments and announcements will be posted here.

Midterm Exams. There will be three midterm exams (dates to be announced) and a final exam. *No make-up exams will be given.* The final exam is scheduled for **May 6, 12:45-2:45**. The final will be offered at no other time.

Homework. Homework assignments will be given in class and posted on the course webpage. Doing the homework is essential for learning the course material. Please note that there are both *exercises* and *problems* given in the text, and that the numbering is slightly confusing. There are *hints* for some of the exercises in an appendix. Homework will **not** be turned in, but time will be set aside in class to discuss it.

Grading. The following *approximate* grading scheme will be used: midterm exams (25% each), final exam (25%). If you miss a midterm exam for a valid reason, an appropriate adjustment will be made to your point total.

Attendance. You are expected to attend every class. Frequent unexcused absences may be taken into account in determining your course grade.

Learning Goals.

- understanding the role of stochastic modeling
- become familiar with the basic mathematical tools and techniques of stochastic modeling
- gain practice developing and analyzing simple stochastic models

Disability-Related Accommodations. If you believe that you need accommodations for a disability, please contact the Office of Disability Services(ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity Statement. The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see <http://academicintegrity.syr.edu>