MAT 526 – Probabillity - Fall 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.

Prerequisite. Solid backgrounds in calculus (MAT 397) and probability (MAT 521)

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 3:30-5:00
- Friday 2:00-3:30
- At other times by appointment

Texts.
- A comprehensive calculus book
- An Introduction to Stochastic Modeling, 4th edition, by Pinksy and Karlin

Course Webpage. Some use of BlackBoard may be made.

Homework.   Reading and homework assignments will be given in class. You are expected to keep up with both.   Doing the homework is **essential** for learning the course material. There are both *exercises* and *problems* given in the text, with *hints* for some of the exercises in an appendix. If we have a grader homework will be turned in to be graded and will count towards the course grade.

Exams. There will be two midterm exams (tentative dates are Sep. 28 and Nov. 2) and a final exam. *No make-up exams will be given.* The final exam is scheduled for **December 16, 3:00-5:00**. The final will be offered at no other time! Do not make travel plans that conflict with this time. Definitions, problems and short proofs will be asked on exams.

Grading.   The two midterm exams and the final exam will be weighted equally. If we have a grader then homework will count for a portion of the course grade. If you miss a midterm exam for a valid reason, which you have communicated **in advance** of the exam, an appropriate adjustment will be made to your point total.   Otherwise you will receive a 0.

Attendance.   Attendance is **required**, it is not optional. You are responsible for all announcements made in class. You are expected to attend **every class,** arriving **on time.** *Please do not take this course if you cannot arrive on time every day.*

Learning Goals.
- understand the role of stochastic modeling
- gain practice developing and analyzing simple stochastic models
- learn and master some of the basic mathematical tools and techniques of stochastic modeling
- understand the relevant mathematical concepts and methods

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.

Faith Tradition Observances. SU's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes.

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