UNIVERSITY OF MINNESOTA DULUTH

INSTRUCTOR: Barry James  E-MAIL: bjames  PHONE: 726-7998

LECTURES: MWThF  11:00-11:50, Chem 251

OFFICE: Solon Campus Center (SCC) 166 (note the change from last semester)

OFFICE HOURS: MW 2:10 - 3:30, Tu 12:30-1:50, and F 2:00 - 3:00 in SCC 166; or by appointment.


PREREQUISITES: One year of calculus, an introduction to probability, and matrix multiplication. Calc II (Math 1297) and Stat 3611 are the formal prerequisites. Math 3355 (Discrete Math) is useful.

COURSE TOPICS: Chapters 1-2: Probability prerequisites.
Chapter 3: Conditional Probability and Conditional Expectation.
Chapter 4: Markov Chains.
Chapter 5: The Poisson Process.
Chapter 6: Continuous-Time Markov Chains.
We will also do a bit of Chapter 11: Simulation.

GRADING: Midterms (3)  Final exam  Problem sets  Simulation problems
42% (18% best two, 6% worst)  28%  18%  12%

The course will be graded on an undergraduate basis: Grade thresholds for each course component will be based on undergraduate performance. Graduate students will usually be assigned extra work on homework and simulations, but the course grade will be decided by the undergrad cutoffs. Scores will be posted on eGradebook in as timely a manner as possible.

EXAMS: There will be three midterm exams, given during the regular class period. The first is scheduled for Wednesday, February 23, the second for Friday, April 1, and the third for Thursday, April 28. The final exam is scheduled for Thursday, May 12, at 10:00-11:55 AM. All exams will be given in Chem 251. If you must miss a midterm exam or the final exam, be sure to make arrangements before (!!!) the exam.

HOMEWORK: Problems will be assigned in almost every class, and completed assignments will be due at times to be specified in class. Most, but not necessarily all, of the problems will be graded. You must follow the department's minimum standards (BE NEAT) but you do not need to copy the problems. You may write on both sides of the paper. Make every effort to hand in homework on time; late homework sets are inconvenient for the grader and, if accepted but not excused in advance, will be discounted. You are encouraged to discuss the problems among yourselves, but you should write the problem solutions in your own words; identical homework solutions are subject to discounts. In addition to the homework sets, there will be special simulation problem assignments, where the same criteria apply.

In addition, it is my policy that for a grade of incomplete to be considered, you must have been passing the course at the point where the problem occurred.

SPECIAL NEEDS: It is the policy and practice of the University of Minnesota Duluth to create inclusive learning environments for all students, including students with disabilities. If there are aspects of this course that result in barriers to your inclusion or your ability to meet course requirements – such as time limited exams, inaccessible web content, or the use of non-captioned videos – please notify the instructor as soon as possible. You are also encouraged to contact the Office of Disability Resources to discuss and arrange reasonable accommodations. Please call 218-726-6130 or visit the DR website at www.d.umn.edu/access for more information.
IMPORTANT: Check your e-mail frequently for updates, reminders, changes in office hours, etc.! The website for this course is under construction, so it is important to obtain and keep all handouts! And read all e-mails.

MAKEUP CLASSES: If I need to miss class because of travel or illness, arrangements will be made for makeups. The same will hold for “snow days,” which will be made up to the extent possible.

CELL PHONES, etc.: Ringing and beeping devices disrupt class activities, and every effort should be made to minimize their use. If it is absolutely necessary that you leave your cell phone or pager on during some class, please inform me at the beginning of the class and sit as near to the door as possible. In addition, students are expected to follow the university’s Student Conduct Code (given at http://www.d.umn.edu/conduct/code). Note: Cell phones and other communicating devices are not allowed during exams.

ACAD. INTEGRITY: Here is the statement suggested by UMD’s Educational Policy Committee: “Academic dishonesty tarnishes UMD’s reputation and discredits the accomplishments of students. UMD is committed to providing students every possible opportunity to grow in mind and spirit. This pledge can only be redeemed in an environment of trust, honesty, and fairness. As a result, academic dishonesty is regarded as a serious offense by all members of the academic community. In keeping with this ideal, this course will adhere to UMD’s Student Academic Integrity Policy, which can be found at http://www.d.umn.edu/conduct/integrity/Academic_Integrity_Policy.htm. This policy sanctions students engaging in academic dishonesty with penalties up to and including expulsion from the university for repeat offenders.”

COUNSELING: As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via the UMD Health Service Counseling website at http://www.d.umn.edu/hlthserv/counseling/