Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: Dr. Richard Lockhart

Textbook:

Introduction to Probability Models 9th ed., by S.M. Ross. Publisher: AcademicPress.

Prerequisite:

Permission of the instructor. Some background in probability such as STAT 280 or STAT 380 is needed.

Calendar Description:

Application of stochastic processes: queues, inventories, counters, etc. Reliability and life testing. Point processes. Simulation.

Outline:

Course Structure: There will be 4 hours per week of lectures, assignments and in class presentations by students. I intend to tailor the course to student interests as much as possible. I will do about 2 weeks of basic probability theory. Then I will do introductions to Markov Chains, to Poisson Processes, to Point Processes, to Brownian Motion and maybe to Renewal theory or Queuing theory or diffusions. The last two weeks of the course will be taken up, I expect, with 1/2 hour presentations from each student taking the course for credit.

Web Materials: I expect to produce web materials at http://www.stat.sfu.ca/~lockhart. Assignment questions will be drawn from various texts. I will not be posting solutions.

Computing Requirements: There will be a computational component to this course; you will be expected to do a simulation project as one assignment. You will have some choice concerning the nature of this project so feel free to make suggestions. Students in the course will be expected to have (or get) and use accounts on the department network.

Grading Scheme:

Assignments	50%
Presentation	25%
Final Exam	25%

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Please consult the General Guidelines of the calendar for more details.

Revised June 2008