STATISTICS 870
Applied Probability Models

Instructor: Richard A. Lockhart   e-mail: lockhart@sfu.ca

Office: TLX 10561   Phone: 291-3264
Web Site: http://www.stat.sfu.ca/~lockhart

Text: *Introduction to Probability Models* by Sheldon Ross (8th ed) plus references to standard probability texts and course handouts for some things. I intend to cover Chapters 1 through 7 plus 10 and 11; coverage in individual chapters will not be complete.

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. (Students interested in measure theory should probably consider STAT 890 this term.) 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: In the frame at the left there are links to notes or slides; I do not yet know how much will be there. 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: Assigments 50%, Presentation 25%, In class final 25%.

Privacy Policy: The Stat & Act Sci department has a policy on privacy under which students who desire so may have their homework returned in some private way; if you are such a student you should speak to me immediately.