STAT 380-3
Introduction to Stochastic Processes

Spring 2013
Day Course

Instructor: Scott Pai (Surrey Campus)

Prerequisite:

STAT 330

Textbook:

Introduction to Probability Models (10th Edition) by: S.M. Ross; publisher: Academic Press

Calendar Description:

Review of discrete and continuous probability models and relationships between them. Exploration of conditioning and conditional expectation. Markov chains. Random walks. Continuous time processes. Poisson process. Markov processes. Gaussian processes. **Quantitative.**

Outline:

1. Review: Chapters 1,2,3
2. Discrete Time Markov Chains
3. Poisson Processes
4. Continuous Time Markov Chains
5. Some applications

Computing requirements:
Students should feel comfortable in some programming environment, such as R.

Grading Scheme:

Assignments – 15%
2 Midterms – 20% each
Final – 45%

The grading is subject to change.

Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list.

Revised January 7, 2013