INTRODUCTION TO STOCHASTIC PROCESSES (3)

Mo, We, Fr 9:30 AM – 10:20 AM SSCK 9509, Burnaby Apr 13, 2019 3:30 PM – 6:30 PM AQ 3149, Burnaby

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STAT 330, or all of: STAT 285, MATH 208W, and MATH 251.

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.

Course Outline:

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

Computing Requirments:

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

| Assignments | 25% |
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| Midterm | 25% |
| Final Exam | 50% |