STATISTICS 380-3

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Instructor: Dr. J. Graham

<u>Prerequisites:</u>

STAT 285 or STAT 280 and MATH 251 or consent of the instructor.

<u>Textbook:</u>

Introduction to Probability Models (8th Edition) by: S.M. Ross; publisher: Academic Press

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<u>Course Description:</u>

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.

<u>Outline:</u>

1. Review: Chapters 1,2,3
2. Discrete Time Markov Chains
3. Poisson Processes
4. Continuous Time Markov Chains
5. Monte Carlo Generation of Random Numbers
6. Some applications

Computing requirements:
There may be a computational component to this course; details have yet to be determined.

<u>Grading:</u>

To be announced first day of class.