MATH 303

Instructors:

Section 201: Yaniv Plan, yaniv@math.ubc.ca Section 202: Richard Balka, balka@math.ubc.ca

Office hours:

Section 201: Mon 10-11 and Fri 11-12, MATX 1119.

Section 202: Tue 15-16 and Wed 12-13 in LSK 300, or by appointment.

Course webpage:

Section 201: http://www.yanivplan.com/303-section-201

Section 202: www.sites.google.com/site/balkarichard/home/teaching-2.

Textbook: S. M. Ross, "Introduction to Probability Models", 11th edition, Academic Press. Earlier editions are indistinguishable for our purposes apart from possible changes to page and problem numbers. An optional more advanced reference: G.R. Grimmett and D.R. Stirzaker, "Probability and Random Processes", 3rd edition, Oxford, (2001).

There are interesting resources at: http://www.math.uah.edu/stat/

Course outline: The course will be based on Chapters 4, 5, 6 of the textbook. The main topics:

- discrete time Markov chains,
- Poisson process,
- continuous time Markov chains.

Evaluation: The final mark will be based on homework (10%), two midterm exams (20% each), and final exam (50%). Term marks may be scaled for consistency in both sections of MATH 303.

Homework: 9 weekly assignments will be given. These are due at the **beginning** of class on the due date, almost each Wednesday. No later assignments will be accepted. The single lowest assignment will be ignored.

Due dates for assignments: January 17, 24, 31; February 7, 28; March 7, 14, 28; April 4.

Tests: There will be two 50-minute tests during class on Wednesday, February 14, and Wednesday, March 21.

Final Examination: will take place in the April examination period. Please do not make travel plans before the exam schedule is announced.

Holidays: February 12, March 30 and April 2; Midterm break: February 19–23.

Discussion board: We will use a Piazza discussion board this term. You can ask questions regarding the course there, and answer other students' questions. Do not share solutions to assignments on Piazza before the due date.

Missed mid-terms and assignments will normally receive a zero grade. Exceptions may be granted by **prior consent** from the instructor, or for a documented **medical emergency**. In the latter case, the instructor must be notified within two working days of the missed test, and presented with a doctor's note immediately upon the student's return to UBC. When an exception is granted for a missed test, there is no make-up test, and the final exam mark will be used.