Instructor: Richard Balka Instructor in Charge: Gordon Slade Contact: balka@math.ubc.ca Office: Math Annex 1103 Lectures: Mon Wed Fri 09:00–09:50, BUCH A203 Course webpage: www.sites.google.com/site/balkarichard/home/teaching-2 Office hours: Tue 13:30-15:00, Wed 11:00-12:30 in Math Annex 1101, or by appointment

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 topics from Chapters 4, 5, 6 of the textbook. The main topics are

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

Evaluation: The final mark will be based on homework (10%), tests (20% each), and the final exam (50%).

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 20, 27; February 3, 10, 24; March 2, 9, 16, 30

Tests: There will be two 50-minute tests during class on Friday, February 12 and Wednesday, March 23.

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

Holidays: February 8, March 25 and 28; Midterm break: February 15-19.

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 post solutions to assignments there.

Missed mid-terms and assignments will normally receive a zero grade. Exceptions may be granted by prior consent from me, or for a documented medical emergency. In the latter case, I must be notified as soon as possible (preferably before the 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.