

STAT 870 Outline

Course outline

Motivating example: the Lions Gate Bridge.

Basics of probability (4 lectures):

- Events, probability laws, etc.
- Independence
- Conditioning
- Expectations.
- Conditional Expectations.

Course outline continued:

Introductions (\approx 2 lectures each) to:

- Markov Chains
- Poisson Processes
- Point Processes
- Birth and Death Processes
- Queuing Theory
- Brownian motion and diffusions
- Simulation

Student presentations (2 lectures)

Timetable

- Week 1: MWF
- Week 2: M F no lecture Wednesday 15 May
- Week 3: MWF
- Week 4: No lectures Monday or Wednesday (May 27, 29) but I will lecture Friday 31 May
- Weeks 5: MWF
- Week 6: MWF

- Week 7: may miss a lecture on June 17 or 19.
- Week 8: MW
- Week 9: MW
- Week 10: MW
- Week 11: MW.
- Week 12: MW July 22, 24, presentations.
- Week 13 Final exam on 29 July at 10:30.