

**STAT 520A – Topics in Bayesian Analysis and Decision Theory**

**2018-2019 – Term 2 (second half) 1.5 credits**

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**Instructor:** Alexandre Bouchard-Côté

**Time/Place:** Term 2 – 02/18/2019- 04/04/2019 M/W 13:30-15:00  
Room ESB 4192

**Prerequisites:** Background in probability (e.g. Stat 302 or equivalent). Exposure to inference or machine learning (e.g. STAT 460 / 560 or MATH 419 or CS 540 or equivalent). If you are not sure, come talk to me after one or two lectures.

**Description:** The topics covered in this course will be selected from state-of-the-art methods in Bayesian Analysis, Decision Theory, and Probabilistic Machine Learning: stochastic process-based models, model selection, advanced Bayesian non-parametric methods, examples in computational biology, computational methods selected from MCMC, PDMP, SMC and ABC.

**Textbook:** The Bayesian Choice. C. Robert. 2007.

**Note: the pdf of this textbook is freely available via UBC Library.**

**More information** The course website is currently under construction but will be linked at <https://www.stat.ubc.ca/~bouchard/teaching.html>