

STAT 520A – Topics in Bayesian Analysis and Decision Theory

2020-2021 – Term 2 (first half)

Instructor: Alexandre Bouchard-Côté

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: Foundations of Bayesian inference. Topics in Bayesian analysis, decision theory, and probabilistic machine learning. Computational methods such as 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>