

# STA365H1 F

## Applied Bayesian Statistics

### Fall 2025 Syllabus

## Course Meetings

### STA365H1 F

Section	Day & Time	Delivery Mode & Location
LEC0101	Wednesday, 10:00 AM - 1:00 PM	In Person: UC 140

Refer to ACORN for the most up-to-date information about the location of the course meetings.

5 office hours per week (1 by instructor, 2 by each of the two TAs)

## Course Contacts

**Course Website:** <https://q.utoronto.ca/courses/404617>

**Instructor:** Prof V. Radu Craiu

**Email:** [radu.craiu@utoronto.ca](mailto:radu.craiu@utoronto.ca)

**Office Hours and Location:** Monday 4-5pm online.

## Course Overview

Bayesian inference has become an important applied technique and is especially valued to solve complex problems. This course first examines the basics of Bayesian inference. From there, this course looks at modern, computational methods and how to make inferences on complex data problems.

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### Course Learning Outcomes

By the end students will be able to set up a prior for the Bayesian model, ascertain its validity and use off-the-shelf software (STAN, JAGS) to perform Bayesian inference. The latter includes model assessment, goodness-of-fit, model choice and model averaging..

**Prerequisites:** STA302H1/STAC67H3/STA302H5

**Corequisites:** None

**Exclusions:** None

**Recommended Preparation:** None

**Credit Value:** 0.5

## Course Materials

Textbooks:

- 1) [Doing Bayesian Data Analysis by John Kruschke](#) [Links to an external site.](#)
- 2) [Bayes Rules by Alicia Johnson, Miles Ott and Mine Dogucu](#) [Links to an external site.](#)

## Marking Scheme

Assessment	Percent	Details	Due Date
Midterm	45%	This test will evaluate the students knowledge on the first half of the material.	2025-10-15
In-Person Final Exam	55%		Final Exam Period

### Late Assessment Submissions Policy

A missed midterm will result in weight shift to the final.