DS3000B/9000 Introduction to Machine Learning

1. Course Information

Course Information

Academic term:	Winter 2023/24
Undergraduate course code:	DATASCI 3000B
Graduate course code:	DATASCI 9000
Lectures:	Tuesdays, 4:30-6:30PM

2. Instructors' Information

Instructor	Email	Office Hours
Fazeli, Alireza	afazeli2@uwo.ca	Mondays 9:00 – 11:00AM Iofc

Schedule:

Week			Topic
1	Jan. 8	14	Introduction and preliminaries
2	Jan. 15	21	supervised learning and model fitting
3	Jan. 22	28	Probability and maximum likelihood
4	Jan. 29	Feb. 4	Test set/out-of-sample idea, classification, evaluation, logistic regression
5	Feb. 5	11	Quantifying uncertainty
6	Feb. 12	18	Test error, cross-validation, model selection, bias-variance trade-off
7	Feb. 19	25	Spring reading week
8	Feb. 26	Mar. 3	Tuesday: summary session, Thursday: midterm Exam
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[Google Chrome](#) or [Mozilla Firefox](#) are the preferred browsers to optimally use OWL; please keep your browsers updated. Students interested in evaluating their internet speed, please click [here.](#)

While self-installation of the software on your own computer is recommended, there is also the possibility of using online platforms. For example:

[Google Colab](#)

Technical Requirements

This is a mostly code-based course so a laptop with internet connection is required. If making your own local installation, a computer with a sufficiently powerful processor (at least two cores @2.2 GHz) with at least 8GB of RAM is recommended. If this were not available, we recommend using an online environment.

5. Methods of Evaluation

The final course grade will be calculated as listed below:

10 Assignments	30%
Midterm Exam	30%
Final Exam	40%

For undergrads (DS3000) to pass the course they must earn **a minimum mark of 50% on the final exam** and the same cumulatively (*i.e.*, assignments + midterm + final). Otherwise, a final course grade of 48% or less will be reported.

Example: An undergrad student obtains 100% on the assignments, 100% on the midterm, and 45% on the final exam.

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact