

Carleton University
School of Mathematics and Statistics
STAT 3553A – *Regression Modeling* – Fall 2020

Instructor Dr. Patrick Farrell, pfarrell@math.carleton.ca, 5412 Herzberg Laboratories
Office Hours: Virtual office hours will be posted on cuLearn on the main course page

Textbook *Applied Regression Analysis, 3rd Edition*, Norman R. Draper and Harry Smith Scheaffer,
John Wiley & Sons 1998.

Grading	Assignments	20%	
Scheme:	Midterm Exam	30%	A non-programmable calculator may be used for the
	Final Exam	50%	midterm and final exams.

Students are required to obtain a minimum score of 40% on each of the above components. Students who fail to do so will automatically be assigned a grade of F in the course. Exceptions to this rule may be made at the discretion of the instructor.

Assignments: There will be five (5) assignments counting equally toward the term mark. The deadline for assignment submission will be given on the assignment. Assignments will be **submitted as a single pdf file uploaded to cuLearn.**

Midterm Exam: There will be a 2-hour midterm exam held on **Sunday, November 15 from 1 to 3 pm.** The midterm exam will cover the material listed under Weeks 1 through 6 of the syllabus.

Final Exam: There will be a 3-hour cumulative final examination scheduled by the University. The final exam period runs from December 12 to December 23, inclusive.

There is a possibility that the midterm and final examinations will be e-proctored.

Academic Integrity: Students are required to be familiar with Section 10 of the Academic Regulations of Carleton University at <http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity>. Students who violate the standards of academic integrity relating to any coursework will be required to meet with the Associate Dean of Science and/or the Associate Dean of Business for disciplinary action. Please familiarize yourself with the policy on academic integrity available at <https://carleton.ca/senate/wp-content/uploads/Academic-Integrity-Policy1.pdf>

Withdrawal: The last day for academic withdrawal is **December 11.**

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, contact me as soon as possible to ensure accommodation arrangements are made (carleton.ca/pmc). The last day to submit Formal Examination Accommodation Forms to the PMC for December examinations is November 13.

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit:

carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

<https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

TENTATIVE SCHEDULE

WEEK	DATES	TOPICS COVERED	LABS / ASSIGNMENTS
1	Sept 14 – Sept 18	Simple Linear Regression: Part 1	Lab 1 on Sept 16
2	Sept 21 – Sept 25	Simple Linear Regression: Part 2	Lab 2 on Sept 23
3	Sept 28 – Oct 2	Multiple Regression: Part 1	Lab 3 on Sept 30, Assign 1 Due Oct 1 (on Weeks 1, 2)
4	Oct 5 – Oct 9	Multiple Regression: Part 2	Lab 4 on Oct 7
5	Oct 12 – Oct 16	Polynomial Regression and Interaction	Lab 5 on Oct 14, Assign 2 Due Oct 15 (on Weeks 3, 4)
6	Oct 19 – Oct 23	Influence Analysis	Lab 6 on Oct 21
FALL BREAK: Oct 26 – Oct 30			
7	Nov 2 – Nov 6	Robust Regression and Model Building	Lab 7 on Nov 4, Assign 3 Due Nov 5 (on Weeks 5, 6)
8	Nov 9 – Nov 13	Nonlinear and Generalized Linear Models	Lab 8 on Nov 11
9	Nov 16 – Nov 20	Logistic Regression: Part 1	Lab 9 on Nov 18
10	Nov 23 – Nov 27	Logistic Regression: Part 2	Lab 10 on Nov 25, Assign 4 Due Nov 24 (on Weeks 7, 8)
11	Nov 30 – Dec 4	Poisson Regression	Lab TBA
12	Dec 7 – Dec 11	-----	Lab TBA, Assign 5 Due Dec 8 (on Weeks 9, 10)