

Carleton University
School of Mathematics and Statistics

STAT 5602W – *Analysis of Categorical Data* – Winter 2020

Instructor: Dr. Patrick Farrell, pfarrell@math.carleton.ca, 5412 Herzberg Laboratories

Office Hours: Office hours will be posted on cuLearn on the main course page.

Textbooks: Agresti, A. *Categorical Data Analysis*, 3rd Edition, John Wiley & Sons, 2013.

Stokes, M.E., Davis, C.S., and Koch, G.G., *Categorical Data Analysis Using the SAS System*, 2nd Edition, John Wiley & Sons, 2001.

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

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 in hard copy to my office, 5412 HP, or deposited in my mailbox in 4313 HP, prior to the deadline indicated on the assignment.

Midterm Exam: There will be a 3-hour midterm exam held on **Saturday, March 7 from 12 to 3 pm**. grade. The midterm exam will cover the material listed under Weeks 1 through 7 of the syllabus.

Final Exam: There will be a 3-hour cumulative final examination scheduled by the University. The final exam period runs from April 13 to April 25, inclusive.

Academic Integrity: Students are required to be familiar with Section 14 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.

Withdrawal: The last day for academic withdrawal is **April 7**.

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 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. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

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. 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 your instructor 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, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website: carleton.ca/pmc

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	ASSIGNMENTS
1	Jan 6 – Jan 10	Categorical Response Data, Binomial and Poisson Parameters	
2	Jan 13 – Jan 17	Multinomial Parameters, Two-Way Contingency Tables	
3	Jan 20 – Jan 24	Prospective, Retrospective, and Cross-Sectional Studies	
4	Jan 27 – Jan 31	Fisher's Test, Stratified and Multi-Way Tables	Assign 1 Due Jan 28 (on Weeks 1, 2)
5	Feb 3 – Feb 7	Generalized Linear Models	
6	Feb 10 – Feb 14	Logistic Regression: Part 1	Assign 2 Due Feb 11 (on Weeks 3, 4)
WINTER BREAK: Feb 17 – Feb 21			
7	Feb 24 – Feb 28	Logistic Regression: Part 2	
8	Mar 2 – Mar 6	Alternate Binary Models, Multinomial Models	Assign 3 Due Mar 3 (on Weeks 5, 6, 7)
9	Mar 9 – Mar 13	Loglinear Models for Contingency Tables	
10	Mar 16 – Mar 20	Models for Matched Pairs	Assign 4 Due Mar 19 (on Weeks 8, 9)
11	Mar 23 – Mar 27	Clustered Categorical Data	
12	Mar 30 – Apr 3	-----	Assign 5 Due Apr 2 (on Weeks 10, 11)