SOCI 5104 W
ADVANCED MULTIVARIATE ANALYSIS

Instructor	Dr. Rania Tfaily
Term	Winter 2025
Course Delivery	In person
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COURSE DESCRIPTION

In this course, we will learn about key statistical techniques that are commonly used in social sciences: multilevel models and logistic models. We will discuss when and how to use the various models, the assumptions that we make, and how to interpret the results. We will also assess and critique a few journal articles that used the statistical techniques above. The course includes an applied component in which we use the statistical software 'Stata' to analyze survey data and run various models. Stata is available through Carleton University. To download Stata SE on your laptop, see https://i.carleton.ca/its-software/stata-se/ and follow the instructions. Please bring your laptop to each class.

EVALUATION

Class participation   10%
Assignments   40%
Research proposal   10%
Presentation   5%
Take-home research paper 35%

TEXT

• Robson, Karen and David Pevalin. 2016. Multilevel Modeling in Plain Language. Thousand Oaks, CA: Sage Publications. (Paperback: $58.33)
• Long, J. Scott and Jeremy Freese. 2014. Regression Models for Categorical Dependent Variables Using Stata, Third Edition. College Station, Texas: Stata Press. (eBook: USD 58.00).
Used copies of the textbooks are acceptable. Additional required readings are available via Carleton University Library website