

PSYC 5410 F – ADVANCED ANALYSIS OF VARIANCE

Course	PSYC 5410 F: Advanced Analysis of Variance
Instructor	Dr. Andrea Howard
Term	Fall 2021
Course Delivery	In Person
Email Address	andrea.howard@carleton.ca
Office Location	SSRB-314-H
Office Hours	TBD

COURSE DESCRIPTION/INSTRUCTOR'S STATEMENT

This course is intended to provide students with a foundational orientation to the general linear model, focusing on its implementation using Analysis of Variance (ANOVA) techniques. Topics include one-way, factorial, and repeated measures ANOVA, ANCOVA, best practices in hypothesis testing, multiple test correction, power and effect size, non-parametric tests and Bayesian ANOVA.

In weekly TA-led tutorial sessions, students will practice data skills in the R software environment including, but not limited to: running ANOVA and t-tests, data management, graphical displays of data, and simulating data.

EVALUATION

Classes will meet **in person** twice per week. Lectures include software demonstrations and student participation. Lectures will be recorded and posted on Brightspace. An in-person lab session will also take place weekly.

Course evaluation will be as follows:

50% Online quizzes/problem sets (Students' best 5 out of 6 assignments count for 10% each)

25% Midterm exam

25% Final exam

TEXT

Rutherford, A. (2011). ANOVA and ANCOVA: A GLM Approach.

This text is available for free as an e-book in the MacOdrum Library. There are no restrictions on how many students may view the book simultaneously.