

PSYC 5410 F - ADVANCED ANALYSIS OF VARIANCE

Course	PSYC 5410 F: Advanced Analysis of Variance
Instructor	Andrea Howard
Term	Fall 2020
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Office Location	
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 online once per week. Lectures will be live with demonstrations and student participation. Lectures will also be recorded and made available on cuLearn. A lab session will also take place weekly and the mode of delivery (live or pre-recorded) will be decided at a later time.

Course evaluation will be as follows:

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

25% Take-home, open-book midterm exam

25% Take-home, open-book 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.