

CGSC 6101 EXPERIMENTAL METHODS AND STATISTICS

Course	CGSC 6101 W
Instructor	John Logan
Term	Winter 2025
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Office Hours	10:30-11:30 AM Mondays

COURSE DESCRIPTION/INSTRUCTOR'S STATEMENT

CGSC 6101 is designed to provide an introduction to statistical techniques beyond those covered in an introductory statistics course. Topics will include data wrangling, data visualization, regression, mixed effects models, and procedures for seeing structure in data (e.g., factor analysis); we will also cover some basic Bayesian statistics. We will use the statistical software R and RStudio. You will use R Markdown for writing reports that contain statistical analyses and figures in an effort to move towards reproducible research.

EVALUATION

Three assignments: 1) 33.3, 2) 33.3, & 3) 33.3%

TEXT

Poldrack, R. (2023). *Statistical thinking: Analyzing data in an uncertain world*. Princeton: Princeton University Press. Paperback version: ISBN 978-0691218441 (https://www.amazon.ca/Statistical-Thinking-Analyzing-Uncertain-World/dp/0691218447/ref=tmm_pap_swatch_0?encoding=UTF8&qid=&sr=) Price (as of July 5, 2024): \$50.00 CD

A Kindle version of the textbook is also available. Note: this is the same text used in CGSC 5101; the 6101 class will cover sections not covered in the 5101 class.