PSYCH 705 – Statistical Methods in Psychology

Tuesdays 5:30pm - 8:20pm

Dr Lily Johnson-Ulrich

Pre-class Checklist

- ☐ Download R from CRAN: https://cran.r-project.org/
- ☐ Download R Studio: https://posit.co/download/rstudio-desktop/
- ☐ Download Git: https://git-scm.com/downloads
- ☐ Create a GitHub Account: https://github.com

A little about me





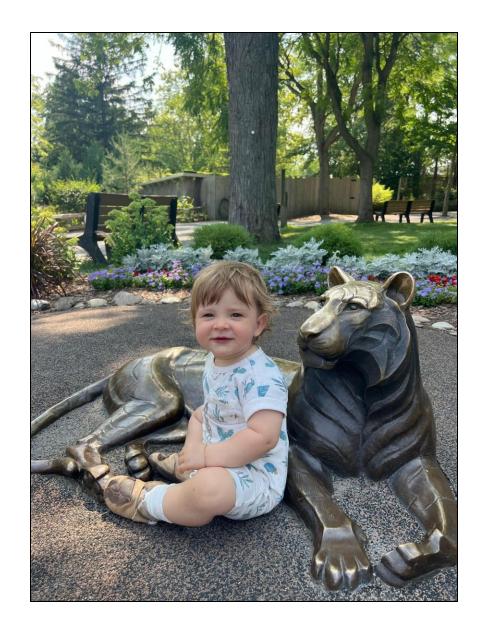
A little about me





A little about me





A little about you

- What is your name and preferred pronouns?
- What lab group are you in?
- Do you know anything about the project you'll be working on for your MSc degree?
- What is your statistical experience?
- Have you ever heard of or used R?
- Have you ever heard of or used GitHub?

Aims of this course

- Apply analytical methods to behavioral data using **R**, including data wrangling, visualization, and statistical model fitting
- Develop reproducible workflows using R Studio and GitHub for version control, project management, and open science practices
- Critically evaluate and interpret the design and analysis of statistical outputs to draw biologically meaningful conclusions
- Integrate ecological theory and statistical methods to design and analyze studies that address animal behavior research questions

Today's lesson plan

- Introduction to R
 - Navigate R Studio
 - Learn about R scripts and R markdown
 - Write basic R code
- Introduction to GitHub
 - Create GitHub repositories for this class
 - Run our first R scripts and push them to Github
- Review the syllabus and course structure





Open R Studio

• Let's get started!

Syllabus & Course Website

- Course Website: https://github.com/l-johnsonulrich/PSYCH705
- View or download the syllabus: https://github.com/l-johnsonulrich/PSYCH705/blob/main/syllabus/PSY705_Syllabus_Fall2025.pdf