

Cogs 119

Programming for Experimental Research

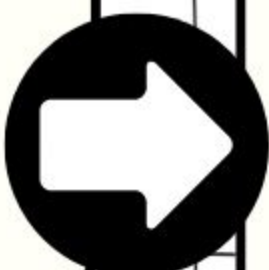
Prof. Martin Zettersten

TuTh 12:30pm - 1:50pm, Peter 104

4 units

Fall 2024

Prerequisites: Math 11 or Cogs 14B or Psyc 70



In this course, you will learn state-of-the-art “tools of the trade” for doing experimental work in the cognitive and behavioral sciences.

The course will provide (1) theoretical background in principles and best practices for designing effective experiments and (2) a hands-on introduction to modern tools for conducting experiments.

The course will take a practical approach to getting started doing experimental research by tackling questions such as:



This course is ideal for students who are interested in getting involved in experimental research and building their data science toolkit. The course is designed to be accessible to students with minimal previous programming experience. If you have never programmed before and are curious how programming could benefit your experimental projects, this course is for you. At the same time, if you are an experienced programmer and would like to understand how to apply your skills to experimental research, this course is for you, too! By the end of the course, students will have built an experimental project that they can add to their data science portfolio.



How can I build a behavioral experiment?

How can I manage projects more efficiently?

What tools can I use to wrangle and understand my data?

How can I contribute to open and cumulative science?