

Research design for Experimental Linguists July 4-8, 2022

Recommended literature:

- Field, A.P. (2013). Discovering statistics using IBM SPSS Statistics (4th ed.). London: Sage.
- Eddington, D. (2015). Statistics for Linguists: A Step-by-Step Guide for Novices. Cambridge: Cambridge Scholars Publishing.

Day 1

Introduction course - Research question – predictions

- How to formulate a proper research question (RQ)
- Deduct predictions from RQ
- Practice with formulating RQs and predictions

Day 2

Statistical model – Variables – Level of measurement

- What is a statistical model?
- What are variables
 - Dependent / independent variables
 - Level of measurement
- What variables need to be measured in order to answer RQs
- What is the required level of measurement

Day 3

Probability – Significance – Hypothesis testing – Power – Effect size

- How do we use probability to test hypotheses
- The importance of power and effect size in testing statistical models

Day 4

Correlation / Regression – T-test / ANOVA

- Testing relationships between variables
- Testing differences between variables

Day 5

Read: Articles to be determined

Putting everything together

- Assignment: Analyze / dissect articles
 - What is the RQ and hypothesis
 - Which variables are measured to answer hypothesis
 - What is level of measurement of these variables
- Q&A (email questions beforehand)