

EDUC 641 Lab: Applied Statistics in Education and Human Services I

Meeting: Wednesdays, 4:00p - 4:50p, Lokey 115; Thursdays, 5:30p - 6:20p, HEDCO 142

Graduate Employees: Havisha Khurana (Havi; she/her/hers); Brittany Spinner (she/her/hers)

Office Hour: by appointment (havishak@uoregon.edu and bspinner@uoregon.edu). In the weeks when assignments are due, GEs will offer 15-minute sign-up slots.

Overview:

The labs to EDUC 641 (and the sequence) are designed to provide hands-on coding support in the R programming language using the RStudio interface so that students can follow the material covered in lectures, textbooks, and assignments. The labs are ungraded and do not count towards student evaluation. Since students in the class come from a diverse coding background, we assume no prior coding experience. However, the lab sessions are not designed to make one a proficient coder. Rather, we hope that students get comfortable coding in R to carry out the statistical analyses covered in class in their own context.

Structure and Expectations:

Lab sessions will be used to review key coding concepts mentioned in class or assist students with the assignments' coding aspect. For the labs used to review content, students will get a worksheet that they will attempt during the lab time. In the labs used to provide support with assignments, students are expected to have reviewed and attempted the assignment and bring their specific questions to the lab. They will also have time to work on their own and ask for help as needed. Students will need a working device with internet connection during the sessions (reach out to the instructor or the GEs if you do not have a device and need support accessing one).

Students are encouraged to -

- a. Work in groups and co-learn with their peers as they navigate through statistical coding
- b. Review course material prior to the lab and identify points of doubts/confusion
- c. Seek GEs support during the session and via emails, office hours, etc.
- d. Attend labs meetings on the days they have signed up for (reach out to the GEs if you plan to attend on a different day)

Schedule (tentative):

Week 1: Setting up R/RStudio and using R script

Week 2: Importing data and saving results + Assignment 1 work session

Week 3: tidyverse() and graphing

Week 4: Assignment 2 work session

Week 5: tidyverse() and graphing

Week 6: datasummary()

Week 7: Assignment 3 work session

Week 8: exporting and interpreting `lm()` output

Week 9: Assignment 4 work session

Week 10: Final Project work session

Course Material Acknowledgment: David Leibowitz, Congli (Claire) Zhang, Cengiz Zopluoglu, Daniel Anderson, Joseph Nese