## Course Description/Instructor’s Statement

This course will introduce students to techniques for multilevel modeling (also known as hierarchical linear modeling or mixed-effects regression). This course will balance conceptual and mathematical understanding, complemented with practice in using multilevel software. Selected topics covered include: understanding nested data, regression with random effects, between- and within-group effects, centering strategies, slopes-as-outcomes, and repeated measures analysis techniques. Much of our class time will be spent working out statistical problems with statistical software and, occasionally, through hand calculation. Students will analyze data using the SAS software system, and this course will include instruction in the use of the SAS programming language.

## Evaluation

- **Problem Sets:** 3 worth 15% each (45% total)
- **Group presentation:** 15% (all students in the same group receive the same grade)
- **Written report:** 40% (individually-graded)

## Text

This course has no required textbook.