

UseR! for Teaching

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The first author will describe the use of R in several classes, all for sociology students: two introductory courses (one for undergraduates and the other for graduate students), in which students interact with R through the R Commander graphical-user interface; a graduate course on applied regression and generalized linear models; and a more advanced graduate course that takes up several topics, including structural-equation models, survival analysis, and mixed-effects models for hierarchical and longitudinal data. A general theme will be the flexibility of R and the ease with which it can be customized and adapted for a variety of teaching tasks.

The second author will describe the use of R with his recently published textbook, *Applied Linear Regression, 3rd edition*, for which “computing primers” have been written for R and several other popular statistical languages. A point that will be emphasized is the difference between courses that “teach to the package” and those that view packages as secondary (or even tertiary). Both approaches have their merits. We will then turn to issues that arise in thinking about a new book project centered on nonlinear regression models. A new package in preparation to support this project will be discussed. The talk will conclude with discussion of a few things that I wish I could do in R but don’t know how to do them.