

## 8-9 January - Workshop Series on Multilevel Modeling

This course will teach you a basic conceptual understanding of multilevel (a.k.a. hierarchical or mixed) modelling and its statistical foundations. You will learn how to critically assess the appropriateness of such techniques in your own and other people's research. I will pay special attention to the translation of theoretical expectations into statistical models, the interpretation of results in multilevel analyses and the general use and misuse of multilevel models in the social sciences. The course also arms you with the basic tools to run multilevel models in software. (Though no laptops are needed. We will go through models together but we will not run them together. You can run them after hours based on the materials I will provide.) Applications will include models with continuous and limited dependent variables in hierarchical, longitudinal and cross-classified nesting situations. By the end of the course, you will be able to use and critically assess multilevel models and to independently discover and master advanced multilevel statistical topics.

Prerequisites for the workshop: The workshop aims at the level of researchers with a solid foundation in regression analysis. Anyone registering should be an experienced user of regression with an understanding of regression assumptions and their diagnostics and the use of interactions, and know the basics of inferential statistics. (Alternatively, you could participate in the Advanced Regression workshop prior.) As with the advanced regression workshop It would be extremely helpful to have basic functional knowledge of R to get the most out of the session. At minimum you should know how to manage files in R, install and load packages, load data and run basic analytical commands. If you can install R and RStudio, know how to load data and run basic things like the `lm` command for linear regression, even if you do a google search before every line of code, you are ready for this workshop. If not, please get there before we begin. I have put together a little online workshop to help you. It is not much. You can do it.

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