



Workshop

# **Multilevel Modelling**

### **Organizational Details**

Instructor:	Prof Dr Elmar Schlüter
Date:	November 15 and 16 2018, 10.00 a.m. to 5 p.m. respectively
Location:	CIP Cluster, 1 <sup>st</sup> floor East Wing, Otto-Behaghel-Str, 8, 35394 Giessen
ECTS:	3 ECTS

## Objectives

The primary objective of this course is to provide participants with a proper understanding and the practical skills necessary for applying linear regression modelling techniques to hierarchically ordered multilevel data structures. Core topics of the course include random intercept & slope models, contextual effect models, cross-level interaction models, and further topics. In order to put these different techniques to practice, participants will become proficient in the use of the SPSS and/or Mplus statistical software. Throughout the course, emphasis will be put on ways of achieving an adequate balance between theoretical assumptions, methods of data analysis, and interpretation of the results. To facilitate the transfer of theoretical knowledge into participants' own research, a large part of the course will be devoted to systematic exercises using freely available survey data. Participants are encouraged, however, to also use their own data.

## Content

The workshop will deal with topics such as:

- Conceptual and statistical foundations of hierarchical linear models
- Intercept-and-Slope-as-Outcome-models
- Contextual effect models

#### Programme

Day 1

10.00 - 11.00	Introduction; examples of multilevel-data structures; when (and when not) to use multilevel models
11.15 – 12.15	Random Intercept- und Intercept-as-Outcome models
13.15 - 14.45	Exercise: How to run Intercept-as-Outcome models for hierarchical Two-level- Data





15.00 - 15.45	Slope-as-Outcome models
15.45 – 16.30	Exercise: How to run Slope-as-Outcome Models
16.30 - 17.00	Q & A
Day 2	
10.00 - 11.00	Multilevel data structures for non-hierarchical forms of nesting: Cross-Classified models
11.15 – 12.15	Exercise: Intercept-and-Slope-as-Outcome models for cross-classified multilevel structures
13.15 – 14.30	Contextual effect models
14.45 – 15.45	Exercise: How to run Contextual effect models
16.00 - 17.00	Q & A

## **Target Group**

This course is designed for application-oriented participants who are familiar with the basics of multivariate data analysis (e.g. conducting and interpreting a multivariate regression analysis) and would now like to expand their scope.

## **Course Language**

English (German, if only German participants) Please note: As this is not an English language course proficiency in English at the C1 level of competency is required.

## To gain the ECTS credit points participants have to:

Complete the exercises & report.

## Registration

If you would like to participate in this workshop, please contact us by **November 05 2018** via e-mail at info@ggs.uni-giessen.de.