Universiteit Utrecht

summerschool UTRECHT

Advanced longitudinal modeling in Mplus (S23)

17 – 21 August 2026

Course Director: Dr. Rebecca Kuiper
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Day	Time	Type	Description	Location
Monday	09:00 -12:15	*Lecture* Prof. dr. Ellen Hamaker	On the formulas behind SEM; calculating the number of parameters and degrees of freedom by hand; how to interpret the TECH1 output; when to worry about the default settings in Mplus.	Koningsberger building room COSMOS
	12:15 -13.15	*Lunch*		
	13:15 -16:30	*Computer lab**		
Tuesday	09:00 -12:15	*Lecture* Dr. Beth Grandfield & *Computer lab**	A journey through the world of latent growth models: Mplus specification, model fit, interpretation of LGM parameters, the metric of time, LGM variations, and more.	
	12:15 -13.15	*Lunch*		
	13:15 -16:30	*Lecture* Dr. Beth Grandfield & *Computer lab**		
Wednesday	09:00 -12:15	*Lecture* Dr. Beth Grandfield & *Computer lab**	Longitudinal models with (latent) categorical variables, including latent class growth analysis, growth mixture modeling, and latent transition analysis.	
	12:15 -13.15	*Lunch*		
	13:15 -16:30	*Lecture* Dr. Beth Grandfield & *Computer lab**		
Thursday	09:00 -12:15	*Lecture* Prof. dr. Ellen Hamaker & *Computer lab**	Introduction to a selection of popular longitudinal SEM models for investigating cross-lagged effects, including the random-intercept cross-lagged panel model (RI-CLPM), autoregressive latent trajectory (ALT) model, dynamic panel model (DPM), and latent curve model with structured residuals (LCM-SR). We critically reflect on the assumptions that are required for a causal interpretation of the estimated cross-lagged effects. We discuss some techniques that show potential for strengthening our causal conclusions using these models.	
	12:15 -13.15	*Lunch*		
	13:15 -16:30	*Lecture* Prof. dr. Ellen Hamaker & *Computer lab**		
Friday	09:00 -12:15	*Lecture* Prof. dr. Ellen Hamaker	Dynamic structural equation modeling (DSEM) to model intensive longitudinal data (e.g., experience sampling or daily diary data); single level models (for N=1) and multilevel extensions (N>1).	
	12:15 -13.15	*Lunch*		
	13:15 -16:30	*Computer lab**		

For information about the Social Programme, please visit the Utrecht Summer School website!

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* **Remarks Computer lab**

During the computer lab meetings, we will make use of software including *Mplus 9*. In case you do not have Mplus (*version 8.11 or higher*) on your own laptop, Mplus will be available via SolisWorkspace (SWS). You can access this via your SolisID (for more information regarding the SolisID, see the pre-departure e-mail).

Manuals for using SWS are available via the following links.
General (brief): https://students.uu.nl/en/myworkplace
Windows (more details): https://manuals.uu.nl/en/handleiding/myworkplace-windows-10/
MacOS (more details): https://manuals.uu.nl/en/handleiding/myworkplace-macos/
Please check before the start of the course whether you can access Mplus in this way.

Breaks:

- ✓ 8.30 coffee & tea
- ✓ 10.30 coffee & tea
- ✓ 12.15-13.15 (or an hour around 12.45 – 13.15) lunch in **Vening Meinesz building A**
  On Monday take a break from 12.15-13.15, because ICT people will be available at 13.15!
- ✓ 14.30 soda drinks

Questions

- If you have any course-related questions, please let us know (MS.SummerSchool@uu.nl).
- In case of other questions (e.g., related to housing), contact **Utrecht Summer School Organization** *(info@utrechtsummerschool.nl or +31 (0) 30 253 4400)*.

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