Universiteit Utrecht

summerschool UTRECHT

Advanced longitudinal modeling in Mplus (S23)

18 – 22 August 2025

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.	Utrecht Science Park, exact location to be announced
	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. Jeroen Mulder & *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. Jeroen Mulder & *Computer lab**		
Thursday	09:00 -12:15	*Lecture* Dr. Jeroen Mulder & *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* Dr. Jeroen Mulder & *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 8.8. In case you do not have Mplus (8.8) on your own laptop, it 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
  On Monday take a break from 12.15-13.15, because ICT people will be available at 13.15!
- ✓ 14.30 soda drinks (Dutch: fris) and fruit

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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