

Title	<b>Advanced Statistical Analysis: Structural Equation Modeling with Mplus</b>
Teacher	Dario Monzani, Università Statale di Milano Luca Pancani, Università degli Studi di Milano - Bicocca
Language	English
Short description	<p>Structural equation modeling (SEM) is a family of advanced statistical techniques that allows to manage, examine, and test complex relationships among a large set of observed and latent variables.</p> <p>The course aims to provide theoretical and methodological basis about SEM. Students will be provided with a general framework of different statistical techniques, such as exploratory factor analysis, confirmatory factory analysis, path analysis, mediation and moderation with latent variables, statistical evaluation of the goodness of fit of specific models, comparison between competing models, and invariance testing.</p> <p>The course will be primarily practical and students will have the opportunity to work on a set of databases provided by the lecturers as well as on their own datasets.</p>
Target audience	<p>PhD students and post-doc fellows, especially (but not limited to) those coming from disciplines were SEM is extensively used, such as psychology, sociology, and economics.</p> <p>The course is introductory to SEM, therefore prior knowledge is not necessary. However, basic knowledge of statistical methods (e.g., regression analysis) might be useful.</p>
CFU	2.5 CFU
Hours	20 hours teaching + students' work and evaluation
Participants (min/max):	Max 30
Calendar:	<p>March 2<sup>nd</sup> – 01.30 pm – 05.30 pm</p> <p>March 9<sup>th</sup> – 01.30 pm – 05.30 pm</p> <p>March 16<sup>th</sup> – 01.30 pm – 05.30 pm</p> <p>March 23<sup>th</sup> – 01.30 pm – 05.30 pm</p> <p>March 30<sup>th</sup> – 01.30 pm – 05.30 pm</p>