

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

2 credits	15.0 h	Q2
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Teacher(s)	Stinglhamber Florence ;
Language :	French
Place of the course	Louvain-la-Neuve
Aims	<i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i>
Evaluation methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. The evaluation of the course takes place during one of the workshops through the realization of a concrete data analysis exercise (no exam).
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. These are small group workshops. The lectures are accompanied by concrete exercises using a structural equation modeling software.
Content	<p>Structural equation modeling, which can be used in various fields of the humanities and social sciences, has a wider scope of application than traditional regression models. First, they aim to estimate the relationships between so-called "latent" or unobserved variables. A latent variable is a concept for which no direct measurements are available. Then, they allow simultaneous examination of the theoretically-based effects of several predictors (or independent variables) on several variables to be predicted (or dependent variables). They thus offer their users the opportunity to approach real and complex situations. In addition, structural equation modeling has the undeniable advantage of directly taking into account in the statistical estimates the errors inherent in any measurement process, called "measurement errors". Finally, structural equation modeling also offers the possibility of a global evaluation of the research models studied. Thus, like traditional statistical methods, they allow an examination of the significance of the estimated relationships but they also give an indication of the degree of fit between the theoretical model being tested and the data collected.</p> <p>The course will address the main analyses that can be done through these methods, namely:</p> <ol style="list-style-type: none"> 1. <u>Confirmatory factor analyses</u>: to test the measurement model, the reliability and validity of the constructs. 2. <u>Path analyses</u>: allowing regressions to be made between several observed variables. 3. <u>Hybrid models</u>: allowing regressions between several latent variables, each measured by several indicators, taking into account the underlying measurement model.
Faculty or entity in charge	EPSY

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Statistic: General	STAT2M	2		
Master [120] in Education (shift schedule)	FOPA2M	2		