



6 credits	45.0 h + 15.0 h	Q1
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Teacher(s)	Grégoire Jacques ;Lories Guy ;Penta Massimo (compensates Grégoire Jacques) ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Item response models, particularly the Rasch model, for the construction of measurement scales Factor analysis, structural equation models
Aims	<p>1 A2 : etc...ceci doit être rédigé de manière commune pour tous les cours et donc je suppose par l'instance responsable de l'adoption de ces définitions</p> <p>----</p> <p><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></p>
Evaluation methods	Multiple choice and/or open questions according to the sections.
Teaching methods	Lectures, readings, demonstrations
Content	<p>The course combines lectures, articles, an introduction to using the software (in particular SPSS, R) and the analysis of real data by the students themselves. A theoretical and methodological framework is provided to promote student activity in the analysis and interpretation of data.</p> <p><b>The Rasch and IRT models</b></p> <p>The students discover the classical approach (Cronbach's alpha) and the modern approach (Rasch, IRT) through examples of analysis of a quantitative questionnaire. They will also discover the psychometrical foundations of scaling involved in interpreting answers to a questionnaire (unidimensionality criterion, fit indices, differential functioning, dichotomous and polytomous item analysis).</p> <p><b>Factor analysis</b></p> <p>The postulates and implications of exploratory and confirmatory factor analysis models. Common practice and specific procedures (eg: rotations, parallel analysis...) as well as technical difficulties.</p> <p>Common applications of the procedures and their software implementation with a critical approach to the results, fit, and interpretation.</p>
Inline resources	Check Moodle
Other infos	<p>Either this course or Data Analysis: Prediction Models is a prerequisite for the Advanced Workshop of methods and analysis</p> <p>The present course requires knowledge of basic concepts and methods in statistics and classical psychometrics. Namely</p> <p>LPSP1011 Statistique : Analyse descriptive de données quantitatives</p> <p>LPSP1209 Statistique, inférence sur une ou deux variables</p> <p>LPSP1212 Psychométrie</p>
Faculty or entity in charge	EPSY

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Education (shift schedule)	FOPA2M	6		
Master [120] in Psychology	PSY2M	6		
Master [120] in Statistic: General	STAT2M	6		