


6.00 credits

45.0 h + 15.0 h

Q1

Teacher(s)	Caesens Gaëtane ;Penta Massimo ;
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
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <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>
Evaluation methods	Written closed-book exam with multiple choice and/or open questions. The final grade is the weighted average of the grades for part A (The Rasch and IRT models) and for part B (Factor analysis). In the final grade, part A accounts for 12/20 and part B accounts for 8/20.
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>Part A: 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>Part 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 their 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	Learning outcomes
Master [120] in Education (shift schedule)	FOPA2M	4		
Master [120] in Psychology	PSY2M	6		