



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>At the end of this learning unit, the student is able to :</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 10/20 and part B accounts for 10/20.
Teaching methods	Lectures and/or videos available on moodle (ezcast), readings, demonstrations and formative exercises.
Content	<p>The course combines lectures, articles, an introduction to using the software (in particular SPSS, Mplus, R) and exercises. A theoretical and methodological framework is provided to promote student activity in the analysis and interpretation of data.</p> <p>Part A: The Rasch and IRT models</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>Part B: Factor analysis</p> <p>The postulates and implications of exploratory and confirmatory factor analysis models. Common practice and specific procedures (e.g., rotations...) 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>The following courses provide important assets for the understanding and integration of this lecture: LPSP1011 Statistique : Analyse descriptive de données quantitatives LPSP1209 Statistique, inférence sur une ou deux variables LPSP1211 Psychométrie</p> <p>The course is given in French, but a set of English slides is available for international students: no</p> <p>The core reading for the course is in French, but equivalent core reading is available for international students in English: no</p> <p>The standard exam is a written exam in French. However, international students taking this course:</p> <ul style="list-style-type: none"> • Will be allowed to use a dictionary when taking the written exam in French: yes • Will be allowed 33% more time when taking the written exam in French: no • Are provided with the opportunity to take the written exam in English: no • Are provided with the opportunity to take an alternative oral exam in English : no
Faculty or entity in charge	EPSY

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Psychology	PSY2M	6		
Master [120] in Statistics: General	STAT2M	6		
Master [120] in Education (shift schedule)	FOPA2M	4		