

6.00 credits

30.0 h + 15.0 h

Q1

Teacher(s)	De Clercq Mikaël ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	The aim of this course is to provide basics skills and knowledge about quantitative data analysis both for descriptive and inferential statistics.
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>The learning outcomes G4, and to a lesser extent, G2 (G26 & G27) are pursued by this course. At the end of this course, the students should be able to:</p> <ul style="list-style-type: none"> - Translate a concrete issue into a research question that fit quantitative data analysis (G41). - Identify the different existing variable types (G43). 1 - Select, apply and interpret descriptive statistics in a concrete research context (G43). - Understand the underlying reasoning of inferential statistics. - Select apply and interpret inferential statistics (essentially bivariate procedure) in a concrete research context (G44) - Critically evaluate research endorsing a quantitative design (G45).
Evaluation methods	Individual written evaluation
Teaching methods	<p>The course is divided into 30hours of lecture course and 15hours of practical exercises.</p> <p>The practical exercises sessions aim at facilitating the development of interpretative and selection skills about descriptive and inferential statistical methods.</p> <p>Both lecture course and practical exercises allows students to get used to the use of statistical software.</p>
Content	<p>Descriptive statistics :</p> <ul style="list-style-type: none"> - Nominal variables : mode - Ordinal variables : median, interquartile range - Continuous variables : mean, variance, standard deviation. <p>Inferential statistics: knowledge</p> <ul style="list-style-type: none"> - Population and sample - Inferential test procedure - Effect size <p>Inferential statistics (statistical tests):</p> <ul style="list-style-type: none"> - Chi-square & Cramers V. - Spearman & Pearsons correlations. - Simple & multiple linear regression. - T-test & one-way Anova. <p>Critical reading:</p> <ul style="list-style-type: none"> - Understanding of the most used statistical terms and icons in empirical literature. - Diagrams, tables and indices interpretation. - Critical distance with traditional manipulation of statistical information. - Awareness of the limitations of the statistical tools.
Bibliography	<p>Bressoux, P. (2008). Modélisation statistique appliquée aux sciences sociales. Bruxelles: De Boeck Université.</p> <p>Dancey, C. et Reidy J. (2007). Statistiques sans maths pour psychologues. Bruxelles : De Boeck.</p> <p>Howell, D. (2008). Méthodes statistiques en sciences humaines. Bruxelles : De Boeck.</p>
Faculty or entity in charge	EDEF

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Advanced Master in University and Higher Education Pedagogy (shift schedule)	EDUC2MC	6		