





5.00 credits	22.5 h + 10.0 h	Q1
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Teacher(s)	Paquot Magali ;
Language :	English > French-friendly
Place of the course	Louvain-la-Neuve
Main themes	Quantitative analysis of linguistic data with R <ul style="list-style-type: none"> • Data visualization • Descriptive statistics : definitions ; computing and representation • Inferential statistics: main concepts • Basic statistical analyses : frequency comparisons, means comparisons, non-parametric testing, correlations • (Theoretical) introduction to regression modelling
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <ol style="list-style-type: none"> 1 Understand why statistics are necessary in linguistics, and how they can be used to test hypotheses, model linguistic phenomena and validate empirical conclusions. 2 Define the basic concepts of descriptive and inferential statistics (e.g. mean, standard deviation, basic concepts of hypothesis testing) 3 Organize and clean linguistic data in preparation for statistical analysis 4 Use graphs and tables to represent linguistic data 5 Interpret graphs and tables in the context of linguistic analysis 6 Calculate and interpret measures of central tendency and dispersion to represent linguistic data 7 Perform simple statistical tests and interpret results 8 Use R to perform basic descriptive and inferential statistics 9 Clearly present the results of statistical analyses 10 Understand a scientific article using (basic) statistics and look critically at the results of a quantitative analysis. <p>This teaching unit contributes to the development and mastery of the following skills and knowledge from the School of Languages and Arts syllabus (see ELAL AA table): 1.4 ; 2.3 ; 2.4; 2.6 ; 3.1 ; 4.5 ; 5.1 ; 5.3</p>

<p>Evaluation methods</p>	<p>The evaluation will be twofold:</p> <ul style="list-style-type: none"> • Continuous assessment (compulsory exercises in the form of quizzes and assignments) (30% of the grade). • Written exam (70%) <p>Course participation</p> <p>In accordance with Article 72 of the Règlement général des études et des examens (RGEE), the course instructor may propose to the examination board that a student be denied registration for the January or September exam if they have not participated regularly in learning activities and/or have failed to submit assignments within the required deadlines.</p> <p>Second exam registration</p> <p>In case of resit, the student will be assessed solely on the basis of a written exam, which will account for 100% of the final grade.</p> <p>Use of generative artificial intelligence</p> <p>Generative artificial intelligence (AI) must be used responsibly and in accordance with the practices of academic and scientific integrity. Since scientific integrity requires the citation of sources, the use of AI must always be reported. Using AI for tasks where it is explicitly prohibited will be considered an act of academic dishonesty/cheating.</p>
<p>Teaching methods</p>	<p>The teaching method will be a mix of traditional lectures and exercises</p>
<p>Content</p>	<p>Quantitative analysis of linguistic data with R (descriptive statistics, inferential statistics, data visualization)</p>
<p>Inline resources</p>	<p>https://moodleucl.uclouvain.be/course/view.php?id=12097</p>
<p>Bibliography</p>	<ul style="list-style-type: none"> • Field, A., Miles, J. and Field, Z. (2012). <i>Discovering Statistics Using R</i>. London : Sage Publications. • Gries, St. Th. (2021). <i>Statistics for Linguistics with R. A Practical Introduction</i>. 3rd edition. Berlin: De Gruyter Mouton. • Howell, D. C. (2016). <i>Fundamental statistics for the behavioral sciences</i>. Nelson Education.
<p>Other infos</p>	<p>This course requires a good command of English (receptive and productive skills).</p>
<p>Faculty or entity in charge</p>	<p>FIAL</p>

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in French and Romance Languages and Literatures : French as a Foreign Language	FLE2M	5		
Master [120] in Linguistics	LING2M	5		
Master [120] in Modern Languages and Literatures : German, Dutch and English	GERM2M	5		
Master [120] in Modern Languages and Literatures : General	ROGE2M	5		
Advanced Master in French as Foreign Language	FLE2MC	5		