

10 credits

22.5 h

Q2

Teacher(s)	Claes Jeroen ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	<p>Data management in a statistical software : vectors, matrices, data frames, etc.</p> <ul style="list-style-type: none"> <li>• quantitative analysis of linguistic data: classical univariate, bivariate and multivariate techniques; descriptive and inferential statistics; contemporary methods of analysis of language variation and change (distinctive collexeme analysis, SemanticVector Spaces, motion charts)</li> <li>• data visualization in a statistical software</li> </ul>
Aims	<p>At the end of the course, the student will be able to select and use appropriate quantitative methods to analyze linguistic phenomena with the help of a statistical software .</p> <p>1 More practically, he will be able to use and understand the software provided in the course and adjust it for the purposes of his own research. He will also be able to represent his data visually with the help of the software.</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	<p>The evaluation will be threefold:</p> <ul style="list-style-type: none"> <li>• Continuous assessment (30%), which includes some tests during the lessons, participation in the classroom and some homework ;</li> <li>• Written exam (30%)</li> <li>• A personal essay (40%): personal essay or participation in a classroom project that will be the analysis of a linguistic dataset with the aim of writing a scientific paper.</li> </ul>
Teaching methods	The teaching method will be a mix of traditional lectures and flipped classroom
Content	<p>The course includes two main axes:</p> <ol style="list-style-type: none"> <li>1. The first part of the course consists of a theoretical approach in the field of statistical analysis and will introduce the main concepts in statistics (descriptive statistics, inference, and modeling).</li> <li>2. The second part of the course will provide a practical approach to the field. It will give the students the opportunity to practise what he/she has learned in the theoretical introduction through regular homework and a personal research project covering real linguistic data.</li> </ol>
Inline resources	/
Bibliography	<p>Baayen, R. H. 2008. Analyzing Linguistic Data: A Practical Introduction to Statistics Using R. Cambridge: Cambridge University Press.</p> <p>Crawley, Michael J. The R book. Chichester: John Wiley.</p> <p>Field, A. et Miles, J. and Field, Z. (2012). Discovering Statistics Using R. London : Sage Publications.</p> <p>Gries, St. Th. 2013. Statistics for Linguistics with R. A Practical Introduction. 2nd edition. Berlin: De Gruyter Mouton.</p> <p>Howell, D. C. (2016). Fundamental statistics for the behavioral sciences. Nelson Education.</p> <p>Rasinger, S.M. (2008). Quantitative Research in Linguistics. New York, Continuum International Publishing Group.</p> <p>Teetor, P. 2011. R Cookbook. Sebastopol, CA: O'Reilly Media</p>
Other infos	Support: slides; articles ou book chapters; R code ; Moodle (web site with forum and exercises).
Faculty or entity in charge	FIAL

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Linguistics	LING2M	10		