UCLouvain

lgeo1341

2023

Statistical analysis in geography

5.00 credits	30.0 h + 30.0 h	Q1

Teacher(s)	Vanwambeke Sophie ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	The course covers the most usual statistical techniques used in geography: regression analysis; factor analysis; clustering; discrete data analysis; spatial statistics. Assignments lead to a basic knowledge of a statistical software (SAS).
Learning outcomes	**At the end of this learning unit, the student is able to :**
	1 To introduce the principal statistical methods used in geography. To be able to use them in practice: choice of the method according to nature of the problem, implementation on a computer, interpretation and communication of the results; To be able to understand the statistical aspects most frequently met in the geographical literature.
Evaluation methods	Theory (60%) : contribution to class based on prepared reading (20%); written exam with access to the course notes allowed (20%); oral presentation of two articles that use methods studied in class (20%). Practicals (40%): exercices (20%) detailed case study (20%). The notes obtained for the contribution to class and to a detailed case study are attached to all exam session of the academic year.
Teaching methods	Lectures integrate elements of flipped classroom to be adapted yearly to the number of students registered, but generally based on student-led presentations of theory or case studies drawn from the litterature, followed by group discussions of important points, possibly integrating a diversity of exercices such as reading and interpreting results, formulating questions, answering quizzes.
Content	This is a course of intermediate leve for which knowledge of basic statistics is assumed. Ojectives: know and master the principal statistical analysis methods; use them correctly and in a relevant fashion in the practice of geography: choosing an appropriate method, applying it using a computer and software, interpret and communicate results, understand the most often encountered statistical features of case studies in the field of geography.
Inline resources	All useful resources are on Moodle.
Faculty or entity in charge	GEOG

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Geography	MINGEOG	5		🔍
Bachelor in Geography : General	GEOG1BA	5	LBIO1283	🔍