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| Teacher(s) | Marquis Nicolas ; |
| Language : | French |
| Place of the course | Bruxelles Saint-Louis |
| Prerequisites | <i>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.</i> |
| Learning outcomes | <p>At the end of this learning unit, the student is able to :</p> <p>The objective of the course is to enable a multidisciplinary approach to the theoretical, methodological and technical aspects of creation, manipulation and analysis of quantitative data.</p> <p>At the end of the course, the student will be able to :</p> <ul style="list-style-type: none"> - to design a sample; - to develop the coding and the data organisation in a statistical-processable format; - to imagine the construction of complex indicators by using analytical and programming tools of allocation within the algorithmic, sequential, repetitive, conditional structures; - to make these data representative of the reference population; - to select the individuals useful for the analysis; - to choose a statistical procedure (uni or bi-variate) according to the question and to the available characteristics of the variable; - to present the results in a table and/or a graphic, being aware of the pros and cons of the different types of presentation; - to assess the risks/the possibility to infer the results to the entire population by using the chi-square and Student's indicators. |
| Evaluation methods | <p>Assessment for the HDPO1231 course is twofold: it consists of group work, which counts for 50% of the final grade, and a written exam, which counts for 50% of the final grade. The assignment instructions will be presented during the first class and made available on Moodle.</p> <p>The overall mark results from a geometric mean of the results of the two parts: $\#((ExamPoints/20)*(WorkPoints/20))$</p> <p>Please note: it is compulsory to sit both parts. If one of the two parts is not taken, the final mark for the UE is 0 (absence justified) or OA (absence not justified).</p> <p>The mark for the part passed (examination or assignment) will be retained, unless the student expressly requests otherwise, for the same academic year.</p> <p>All work must be the student's own work. Students are expected to adhere strictly to the rules and good practice regarding citation, referencing and avoidance of (self-)plagiarism. Students are expected to know and understand these rules and practices. Failure to comply with these rules may result in academic and/or disciplinary action for plagiarism and/or irregularity, in accordance with the General Study and Examination Regulations.</p> <p>The use of generative AI is accepted provided that it is occasional and limited. The use of AI must be explicitly indicated and referenced. Any part of the work relying in any way on generative AI must be clearly identified (e.g. by footnote), specifying which generative AI tool has been used, for what purpose, in what way, and to what extent. Failure to do so may constitute an irregularity.</p> |
| Teaching methods | <p>The course will be taught ex-cathedra 3h/week and will provide the theoretical elements needed to meet the learning outcomes : theory and vocabulary of quantitative data, data production and management, understanding ingredients for the analysis, mastery of the conditions of uses of methods and, above all, interpretations of results. The course will be as participatory as possible.</p> <p>The practical exercises (TP) will require commitment from the students, as they are set to allow them to put in practice the theoretical elements presented during the course, in particular : creating and making use of a questionnaire from a research question, interviewing respondents, creation of a database and transforming variables, as well as interpretation exercises of SPSS software outputs. Exchanges between students as well as with teaching assistant and the teacher will be fostered. These sessions are also intended to help students realize the expected deliverable (cf. below).</p> |
| Content | <p>The course and the seminar follow the construction process of a quantitative survey step by step, from the questions that arise at the start of a research project to the production of results, via the collection and processing (exploration and exploitation) of the data.</p> <p>The theoretical part of the course includes concrete examples of quantitative research as well as 'statistical criticism'.</p> |

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| | <p>The practical work consists of putting into practice the tools seen in the course, through the use of spreadsheets and statistical software.</p> <p>It is important to note that this course is not a general statistics course: it approaches the subject solely from the angle of social science research.</p> <p>Course outline :</p> <p>Chapter 1: Why quantitative research ?</p> <p>Chapter 2: The foundations of quantitative research</p> <p>Chapter 3: The fundamental tools of the quantitative approach</p> <p>Chapter 4: Elements of descriptive statistics</p> <p>Chapter 5: Introduction to statistical inference</p> <p>Chapter 6: Controlling relationships</p> <p>Chapter 7: Elements of multidimensional statistics</p> |
| Bibliography | Sera communiquée au fil du cours. Les slides, seule ressource recommandée, sont disponibles sur moodle. |
| Other infos | <p>At the university level, it is up to the students to decide whether they attend to the lessons or not. Teacher and assistants of course recommend a maximal attendance at both lessons and TPs. Except in the event of force majeure, non-attendance and its potential consequence are the student's sole responsibility.</p> <p>In the same way, students are free to organize their time during the academic year. Once again, we recommend a continuous assessment of the course comprehension AS WELL AS a continuous commitment in the deliverable.</p> <p>Students who decide not to follow those instructions and who would unfortunately fail at the January examination round should be aware that no catching-up session will be organized in the second term, nor in ex-cathedra teaching, nor in informal meetings with teaching assistants. The course content, about which the students were allowed to ask questions during the first term will be considered as seen and understood.</p> <p>Students who failed in January will of course be given the opportunity to get explanation about their deliverable and examination, but it is their sole responsibility to bring the needed improvement at June or August sessions.</p> |
| Faculty or entity in charge | ESPB |

| Programmes containing this learning unit (UE) | | | | |
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| Program title | Acronym | Credits | Prerequisite | Learning outcomes |
| Bachelor in Political Sciences (shift schedule) | SPDB1BA | 10 | BHDPO1152 |  |