LUISS

Syllabus PhD in Politics

Year of Offer	2024-2025 – second year
Study Course	PhD Research in Politics
Teaching/Module	Applied Quantitative Methods
Teaching Period	First Semester
Professors	Francesco Marolla
Course Year	2024-2025
Field	SPS/04 SCIENZA POLITICA
CFU	5
Total Hours of Frontal Instruction	20

Tipo Testo	Testo in Italiano/Inglese

OBIETTIVI/LEARNING GOALS

The aim of the course is to make candidates familiar with the usage of basic and advanced mainstream quantitative analytic tools, through their first-hand application to original research questions of interest for the candidates of the course itself.

The course will largely improve students' ability to conduct their own quantitative research (also with possible reference to their final thesis), but also to confront themselves with empirical scientific literature in different subfields of political science.

Further, the course is designed to help the candidates become familiar with one of the mostly frequently used software for statistical analysis – namely, STATA.

The course is fully organized in seminars, and it requires the constant active participation in class by PhD candidates in order to be successful.

After the initial introductory classes, in which the teacher will outline the organization of the course and present the different advanced techniques (namely, factor analysis, ordered logistic regression, multinomial regression, multilevel regression, time-series regression), each student will select a research project of her/his liking. Such research projects are based on answering a research question about the relationship among variables, through quantitative data analysis which employs one of the abovementioned methods.

During the course, each of these projects will individually be discussed in class, first ahead of their implementation (in terms of the research design – which data, which variables, which empirical analyses), and then after their realization (to discuss their execution and the interpretation of the empirical findings). These seminar sessions are designed to both facilitate the candidates individually in the preparation of their final papers (see below), but also to provide moments for in-class discussion of the advances methods around which the course revolves both in theoretical and in practical terms.

RISULTATI DI APPRENDIMENTO ATTESI/ INTENDED LEARNING OUTCOMES

Conoscenza e comprensione/ knowledge and understanding:

The course is designed to help students become familiar with one the most widely used software for statistical analysis, namely STATA. Moreover, the students will become familiar with the advanced quantitative methods more frequently used in Political Science studies.

Capacità di applicare conoscenza e comprensione/ applying knowledge and understanding:

The course will largely enhance students' ability to conduct their own quantitative research (including with possible reference to the final thesis), but also to engage with the empirical scientific literature in different subfields of political science.

Autonomia di giudizio/ making judgements:

Students will be able to make sense of scientific contributions employing advanced statistical tools, which are routinely employed in quantitative research. Thus, they will be able to better navigate the scientific literature, regardless of the specific subfield; and possibly serve as better referees for academic journals or discussants in conference panels.

Abilità comunicative/ communication skills:

The course features a series of presentations delivered by the students revolving around the design of a quantitative analysis first, and then its execution and interpretation. This way, students will be able to improve their skills when presenting their own research (i.e., at a conference), even though that might not involve quantitative analyses.

Capacità di apprendimento/ learning skills:

Through a combination of frontal explanations by the teacher and first-hand employment of the advanced statistical techniques, the students will acquire the ability to autonomously design and perform rigorous empirical analyses to investigate the political world and assess relevant research questions about it.

Prerequisiti / Entry Requirements	Successful completion of first-year courses. Candidates are expected to know the main quantitative research approaches in political science, typically employed in empirical research on the various themes of the discipline. They are also expected to be familiar with different research designs and basic statistical techniques (i.e., regression analysis). Further, they are expected to be able to use the statistical package software STATA.
Contenuti Del Corso / Course Content	**Session 1 – Tuesday, October 8: 15.00-17.00** Stata tutorial and definition of course organization <u>Required readings</u> Donald J. Treiman (2009), Quantitative Data Analysis: Doing Social Research to Test Ideas, Wiley – Chapters I, II, III, V, X **Session 2 – Tuesday, October 15: 15.00-17.00** Factor analysis <u>Required readings</u> Donald J. Treiman (2009), Quantitative Data Analysis: Doing Social Research to Test Ideas, Wiley – Chapter XI **Session 3 – Tuesday, October 22: 15.00-17.00** Multinomial and ordinal logistic regression <u>Required readings</u> Donald J. Treiman (2009), Quantitative Data Analysis: Doing Social Research to Test Ideas, Wiley – Chapters XII, XIV **Session 4 – Tuesday, October 29: 15.00-17.00** Multilevel analysis and panel analysis <u>Required readings</u> Donald J. Treiman (2009), Quantitative Data Analysis: Doing Social Research to Test Ideas, Wiley – Chapter XV **Session 5 – Tuesday, November 5: 15.00-17.00** In–class outline and discussion of research design for student project: #1 **Session 6 – Tuesday, November 12: 15.00-17.00** In–class outline and discussion of research design for student project: #2 **Session 7 – Tuesday, November 19: 15.00-17.00** In–class outline and discussion of research design for student project: #3 **Session 8 – Tuesday, November 26: 15.00-17.00** In–class presentation and discussion of empirical analyses from student project: #1 **Session 9 – Tuesday, December 3: 15.00-17.00** In–class presentation and discussion of empirical analyses from student project: #2 **Session 10 – Tuesday, December 10: 15.00-17.00** In–class presentation and discussion of empirical analyses from student project: #3

Testi Di Riferimento / Reference Books	Donald J. Treiman (2009), Quantitative Data Analysis: Doing Social Research to Test Ideas, Wiley – Chapters I, II, III, V, X, XI, XIII, XIV, XV.
Metodologie Didattiche/ Teaching Method	N/A
Modalità di verifica e di accertamento dell'apprendimento/ Detailed Description of Assessment Method	In case a student cannot attend a particular session for a valid reason (such as illness), she should inform the course coordinator via email at the earliest opportunity. In case a student does attend enough meetings, she will be invited to discuss your attendance with the coordinator of the PhD programme (who may determine that she have failed the course and will need to repeat it in the following year)." As mentioned above, active participation by candidates is expected. Evaluation is based on class participation (1/3) and (2/3) the final paper (see below). Candidates are expected to deliver a written paper with a length of max. 4.000 words by the end of the week of the final class of the course. The completed paper will need to be submitted via email as a pdf document (including a cover page with the student's name and the word count). These papers should outline the research design, present the findings, and discuss them. The final course grade will be expressed in thirtieths (/30). A pass mark will be attained with a minimum mark of 18/30, while the maximum mark will be 30/30 com laude.