

Course number		U-LAS06 10014 SE43						
Course title (and course title in English)	Economy and Society I-E2 Economy and Society I-E2				Instructor's name, job title, and department of affiliation	Institute of Economic Research Senior Lecturer,TAO, Junfan		
Group	Humanities and Social Sciences			Field(Classification)	Jurisprudence, Politics and Economics(Foundations)			
Language of instruction	English			Old group	Group A		Number of credits	2
Number of weekly time blocks	1	Class style	Seminar (Face-to-face course)		Year/semesters	2025 · First semester		
Days and periods	Tue.5		Target year	Mainly 2nd year students	Eligible students	For liberal arts students		
[Overview and purpose of the course]								
This course is a seminar that discusses the following two books: 1. "Data analysis for social science: A Friendly and Practical Introduction" by Elena Llaudet and Kosuke Imai. 2. "Quantitative social science: An introduction" by Kosuke Imai These two books introduce the three elements of data analysis required for quantitative social science research: research contexts, programming techniques, and statistical methods. The object of the course is to provide a hands-on introduction to the tools and techniques of quantitative social science. The course covers fundamental statistical concepts and introductory programming skills. Throughout the course, students will engage with basic concepts and methods with the aim of gaining a sense of how data analysis is used in quantitative social science research.								
[Course objectives]								
After completing the course, the students are expected to: ~ Read, understand, and practice "Quantitative social science: An introduction" by Kosuke Imai. ~ Have a good knowledge of how data analysis is used in social science research ~ Acquire the basic methodology and programming necessary for data analysis, and be able to interpret the output. ~ Be able to adapt these methods to the problems of interest in your own research. ~ Prepare students for further study of quantitative methodology in economics, sociology, and other fields.								
[Course schedule and contents)]								
Each week a chapter or part of a chapter will be discussed in class. It is essential that before attending class you read the relevant chapters. The course consists of the following topics, each of which will be covered in 1-2 lectures (1.5 - 3 hours of class time): Part 1 (Data analysis for social science: A Friendly and Practical Introduction) 1. Introduction 2. Estimating Causal effects with Randomized Experiments 3. Inferring Population Characteristics via Survey Research								

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4. Predicting Outcomes Using Linear Regression
 5. Estimating Causal Effects with Observational Data
 6. Probability
 7. Quantifying Uncertainty

Part 2 (Quantitative social science: An introduction)

1. Introduction
2. Causality
3. Measurement

Total : Approximately 14 classes, 1 Feedback session (i.e. 15 lectures per semester, excluding examinations).
The course yields two credits.

The course contents may be subject to change depending on the progress of the course and the students' level of understanding.

[Course requirements]

Students are required to have the English skills required to read the assigned texts, attend class and participate in discussions.

Students MUST have a copy of the book (either a hard copy or an electronic copy) as it will be used from the very beginning of the course.

Students should bring their computer as programming will be practiced during the course.

[Evaluation methods and policy]

Grading will predominantly (70-100%) be based on class presentations and discussion of ideas. Up to 30% may be based on final presentation.

[Textbooks]

Elena Llaudet and Kosuke Imai 『Data analysis for social science: A Friendly and Practical Introduction』 (Princeton University Press, 2022) ISBN:9780691199429

Kosuke Imai 『Quantitative social science: an introduction』 (Princeton University Press, 2017) ISBN: 9780691167039

[References, etc.]

(References, etc.)

John, Verzani. 『Using R for Introductory Statistics』 (Chapman & Hall/CRC The R Series) ISBN: 9781466590731 (Online book: <https://www.math.csi.cuny.edu/Statistics/R/simpleR/>)

[Study outside of class (preparation and review)]

Before classes, the assigned chapters of the book, as well as any other readings assigned in class, should be read each week.

After classes, as stated the textbook on page 7, Section 1.2 in "Quantitative social science: an introduction", "How to use this book"

One can learn data analysis only by doing, not by reading. It is best accomplished by trying out the code in the book on one's own, playing with it, and working on various exercises that appear at the end of each chapter.

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[Other information (office hours, etc.)]

Office hour by appointment.