科目ナンバリング U-LAS06 10015 SE43										
授業科目 <英訳>		Economy and Society II-E2 Economy and Society II-E2				担当者所属 職名·氏名 経済研究所			講師 TAO Junfan	
群	人文・社会科学科目群 分野(分類) 法				法・	政治・経済(基礎)			使用言語	英語
旧群	A群	単位数	2単位	週コマ数	1コ	マ	授業	形態演	演習(対面授業科目)	
開講年度・ 開講期	2025・後期 曜日		曜時限火	艮 火5			当学年	主として2[	雪生 対象学	生文系向

#### [授業の概要・目的]

This course is a seminar that discusses the book "Quantitative social science: An introduction" by Kosuke Imai.

The book introduces 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 both basic statistical concepts and basic programming skills.

In this course, students will learn elementary concepts and methods with the aim of gaining a sense of how data analysis is used in quantitative social science research.

## [到達目標]

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 quantitative 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.

### [授業計画と内容]

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 2 to 3 lectures (3 to 4.5 hours of class time):

- 1. Introduction
- 2. Causality
- 3. Measurement
- 4. Prediction
- 5. Discovery
- 6. Probability
- 7. Uncertainty

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

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### Economy and Society II-E2(2)

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

### [履修要件]

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

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.

# [成績評価の方法・観点]

Grading will predominantly (70-100%) be based on class presentations and discussion of ideas. Up to 30% may be based on tests taken in class throughout the semester.

# [教科書]

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

### [参考書等]

#### (参考書)

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

Peter, Dalgaard. Fintroductory Statistics with R (2nd ed) (Springer, 2008.) ISBN:9780387790534 (The e-book is available on kuline.)

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/)

# [授業外学修(予習・復習)等]

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, "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.

# [その他(オフィスアワー等)]

Office hour by appointment.

# [主要授業科目(学部・学科名)]