### L.0: Introduction

Econometrics 1: ver. 2024 Fall Semester

Naoki Awaya

### Topics covered in this class

- Basics of probabilities and statistics
  - Discrete/continuous distributions, joint distributions
  - Expectations, covariance
  - Law of large numbers, central limit theorem
- Basic econometric methods
  - Simple regression, multiple regression
  - Hypothesis testing
  - Instrumental variables
- Note: More advanced topics (such as causal inference) are covered in Econometrics II

#### **Materials**

- Main material: Lecture slides
- But reading (one of) the following textbooks would be helpful
  - Introductory Econometrics: A Modern Approach, South-Western Pub, Jeffrey Wooldridge.
  - Introduction to Econometrics, Pearson Education Limited, James Stock and Mark Watson.

## **Grading**

- 30%: Homework x2
- 30%: Empirical report
  - A data set will be given
  - Propose a research question, and do an appropriate econometric analysis
- 40%: Final
  - Last day of the semester (current plan)
  - Open book (only "physical materials" are allowed)

# Miscellaneous things

- email: nawaya at waseda.jp
- Office our: by appointment
  - A regular OH will be introduced soon