

Economic Statistics I

Syllabus Number 8B211
course of economics
studies Elective
Requisites 2 credit

MIZOGUCHI, Yoshihiro

1. Course Description

Economic statistics is a field that attempts to clarify the mechanism of economic activity through the analysis of economic data that represents the results of economic activity. This course is intended for those who have credits for "Introduction to Economic Data Analysis". This course consists of two parts. One is the contents about how to create economic statistics. The other is the contents about the methods of analyzing economic data. Economic data is often represented in the form of quantitative data. And, methods of analyzing quantitative data are based on statistics. Therefore, this course will take up basic parts of statistics.

2. Course Objectives

The goal for those who register this course is two points. One is to master basic contents about how to create economic statistics. The other is to master the basic contents of statistics, which is the basis of quantitative data analysis methods.

3. Grading Policy

Those who register this course are graded by homework and final exam. The evaluation ratio is planned to be 30% for homework and 70% for the final exam. Details of grading policy will be announced in the guidance.

4. Textbook and Reference

Textbook

Specific textbook is not used in this course. Course materials are distributed through LMS. We will teach based on the course materials.

5. Requirements(Assignments)

The preparation required for this course is as follows:

-Depending on the progress of the course, download the materials from the LMS and read the downloaded materials.

-As far as possible, refer to the references for the details of the contents described in the materials, and the words that you do not understand.

The review required for this course is the following:

-Review the materials and notes which is taken during class.

-Read the bibliography about subjects you do not understand or you are interested.

-When homework is given, please complete and submit them.

6. Note

7. Schedule

- [1] Guidance
- [2] What is economic statistics?
- [3] Lorenz curve and Gini coefficient
- [4] correlation and causality
- [5] spurious correlation and partial correlation coefficient
- [6] moving average, coefficient of variation, and auto correlation
- [7] price index and seasonal adjustment
- [8] ordinary least squares
- [9] multiple regression
- [10] dummy variables and multicollinearity
- [11] sample space and event
- [12] definition of probability
- [13] conditional probability
- [14] expected value and variance of random variable
- [15] wrap-up