

**ECON 216202
Statistics (II)
Spring 2024**

Course Outline

Instructor: Mr. CY (Chor-yiu) SIN
Office: 804 TSMC Building
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Office Hours: By appointment
Teaching Assistants:
Jerry CHU: j23567@gmail.com
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Location: GEN IV 224 (綜合四館 224 室)
Course Website: elearn.nthu.edu.tw
Class Meets: 2/19, 2/26, 3/4, 3/22, 3/28, 3/25, 4/1, 4/8
4/15, 4/22, 4/29, 5/6, 5/13, 5/20, 5/27, 6/3
Monday 10:10am – 13:00pm (M3M4Mn)

Course Objectives:

This 16-week course is a continuation of 11210 ECON 216202 《Statistics (I)》 offered by Professor Loretta Fung. The purpose of this sequence is an introduction to statistical methods and applications for economics students. We will emphasize on statistical concepts and methods that are commonly used in economics and business, and these materials will be presented with applications to data analysis. In the spring semester, we will focus on hypothesis testing, linear regression with one explanatory variable, linear regression with more than one explanatory variable, and analysis of variance.

Textbook:

Anderson, D., D. Sweeney, T. Williams, J. Camm, J. Cochran, M. Fry, and J. Ohlmann (2019). Statistics for Business and Economics. 14th edition. Cengage.

Assessment:

The course grade is based on three elements: assignments, a mid-term examination, and a final examination.

Assignments: There will be several problem sets and they will be assigned after finishing major topics. The assignments will include both problem solving and empirical exercises. Though EXCEL will be used in class, any software such as

EViews, EXCEL, MATLAB, Python, R Studio, SAS or STATA may be used for the assignments. Late submission is not accepted.

Mid-term Examination: The mid-term examination will be held in class during the class hours. The examination is expected to take 120 minutes. Failure to attend the mid-term examination may result in 0 mark.

Final Examination: The final examination will also be held during the class hours. The examination is expected to take 120 minutes. Failure to attend the final examination may result in 0 mark.

The grades are assigned according to the following formula:

20%	Assignments
35%	Mid-term Examination (April 8)
45%	Final Examination (June 3)

(Mark your calendar.)

Reading List

1. Inferences about means and proportions with two populations (chapter 10)
2. Inferences about population variances (chapter 11)
3. Comparing multiple proportions (chapter 12)
4. Experimental design and analysis of variance (chapter 13)
5. Simple linear regression (chapter 14)
6. Multiple regression (chapter 15)
7. Regression analysis: model building (chapter 16)
8. Time series analysis (chapter 17)
9. Nonparametric methods (chapter 18)

Note: chapters 17 and 18 will be covered if time permits.

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