



# ECON 2121B

## Methods of Economic Statistics

### 2<sup>nd</sup> Term, 2023-2024

#### Lecture Hours and Location:

Fri: 8:30am - 11:15am (FYB LT4)

#### Instructor:

YUNG Chor-Wing Linda	Office: ELB 1010	Phone: 3943-8192	E-mail: <a href="mailto:cwyung186@cuhk.edu.hk">cwyung186@cuhk.edu.hk</a>
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#### Teaching Assistants:

Travis SW NG	Office: ELB 1007	E-mail: <a href="mailto:sw.ng@cuhk.edu.hk">sw.ng@cuhk.edu.hk</a>
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#### Course Description and Objective:

This course studies basic statistical concepts and their applications. Major topics include: descriptive statistics; probability distributions; sampling; estimation; hypothesis testing; correlation and regression analysis. Students should have knowledge of elementary differential and integral calculus, and are advised to take ECON1111 before taking this course.

Upon successful completion of this course, students should demonstrate their mastery of the basic knowledge of statistical concepts and techniques, develop their statistical thinking and reasoning skills, and feel comfortable in applying the statistical techniques to analyze data.

**Recommended Textbook:** Anderson, Sweeney, Williams, Camm, Cochran, Fry and Ohlmann, 2020, *Essentials of Statistics for Business & Economics*, 9<sup>th</sup> edition, Cengage Learning  
eBook is available to purchase from online store

#### Course Assessment Scheme:

In-class and computer exercises	30%
Mid-term	30%
Final	40%

#### Course Activities:

- **Tutorials and Problem Sets**

Problem sets will be posted on the class Blackboard as we go along. It is an essential adjunct to the lecture material, and will assist you in preparing for the exams. Therefore, it is very important that you work on your own before tutorial class. Tutorials will start on the third week. It will go through some of the assignments.

- **In-class and computer exercises**

There will be a few in-class and computer exercises. Both excel and R will be taught. Excel will be done mainly in class, so please bring your notebook to class. R will be via blended learning method. **No makeup** for in-class and computer exercises.

- **Mid-term (23<sup>rd</sup> Feb, 2024), (tentative)**

Please note carefully the date, time and venue of the mid-term; there will be **no makeup exam** for the mid-term. This is **not negotiable**. If you miss the mid-term, due to a documented illness or emergency, and have **received my approval prior to the mid-term exam**, your final exam score will receive the weight of the mid-term in addition to its own weight.

- **Final (time and date will be announced later)**

Final will be arranged by the University, please observe the date and venue. The University has very strict regulations on how the final exam works. So please make sure you can make it.

#### Course Content and Tentative Schedule:

<u>Week</u>	<u>Topic</u>	<u>Readings: Chapter</u>
1	Data and Descriptive Statistics	1, 2
2	Numerical Measures	3
3	Introduction to Probability	4
4	Discrete Probability Distributions	5
5	<b>Chinese New Year</b>	
6	Continuous Probability Distributions	6
7	<b>Mid-term</b>	
8	Sampling and Sampling Distributions	7
9	<b>Reading Week</b>	
10	Interval Estimation	8
11	Hypothesis Tests	9
12	Inference About Mean and Proportions with Two Populations	10

13	Inference About Population Variances	11
14	Analysis of Variance	13
15	Simple Linear Regression (tentative depending on our progress)	14

### **Grade Descriptors:**

<b><u>Grade</u></b>	<b><u>Descriptions</u></b>
<b>A / A-</b>	Outstanding/Generally outstanding performance on all learning outcomes.
<b>B+ / B / B-</b>	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.
<b>C+ / C / C-</b>	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses
<b>D+ / D</b>	Barely satisfactory performance on a number of learning outcomes
<b>F</b>	Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.

Note: • Course notes and announcements will be posted on the class Blackboard. (<https://blackboard.cuhk.edu.hk>) Please check frequently.

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>.

With each assignment, students will be required to submit a signed [declaration](#) that they are aware of these policies, regulations, guidelines and procedures. For group projects, all students of the same group should be asked to sign on the declaration.

For assignments in the form of a computer-generated document that is principally text-based and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment. Assignments without the receipt will not be graded by teachers. Only the final version of the assignment should be submitted via VeriGuide.