



**ISOM2500 Business Statistics (L4, L5)  
Spring Semester 2026**

**Course Outline**

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Instructor	Carsten CHONG Assistant Professor Department of ISOM
Office Hours Email	By appointment <a href="mailto:carstenchong@ust.hk">carstenchong@ust.hk</a>
Teaching Assistant Email	Vanessa WEI <a href="mailto:imvanessa@ust.hk">imvanessa@ust.hk</a>

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**Class Schedule and Location**

L4 13:30 – 14:50 (Tue & Thu)	LSK G012
L5 9:00 – 10:20 (Tue & Thu)	LSK G012

**Course Description**

Statistics play an important role in every discipline that utilizes data. The diverse areas involving application of Statistics include Science, Medicine, Engineering, Business, among others. This course is designed to teach fundamental concepts and methods in statistical thinking and reasoning, from which students can understand the business and economic situations, and make informed decision wisely and effectively, when facing data from various sources that quantify relevant information to a problem in the business world.

**Intended Learning Outcomes (ILOs)**

By the end of this course, students should be able to:

- ILO1: Understand and master basic theoretical concepts and methods in statistical thinking and reasoning, and be able to decide what statistical techniques are most appropriate to use in a given situation, and state their advantages and limitations.
- ILO2: Apply both descriptive and/or basic inferential methods in Statistics to solve a real problem in business environment.
- ILO3: Interpret and present statistical results that are either self-produced or provided by others.
- ILO4: Be ready to learn multiple linear regression in more advanced courses.

## Assessment and Grading

Assessment Task	Contribution to Overall Course grade	Details
Non-Exam Assessment	20%	See below for details
Quiz 1	20%	March 23, 7-8pm
Quiz 2	20%	April 18, 7-8pm
Final examination	40%	Will be announced by AR

## Grading Rubrics

Grade	Short Description (Overall mark out of 100)	Explanation
A	Excellent Performance (>85)	Demonstrates a comprehensive grasp and understanding of fundamental statistical concepts, selection and application of appropriate descriptive and inferential methods in Statistics, analysis of the data, presentation and interpretation of results of the statistical analysis.
B	Good Performance (>70)	Shows a good knowledge of fundamental statistical concepts, selection and application of appropriate descriptive and inferential methods in Statistics, analysis of the data, presentation and interpretation of results of the statistical analysis.
C	Satisfactory Performance (>55)	Possesses an adequate understanding of fundamental statistical concepts, selection and application of appropriate descriptive and inferential methods in Statistics, analysis of the data, presentation and interpretation of results of the statistical analysis.
D	Marginal Pass (>40)	Has threshold knowledge of fundamental statistical concepts, selection and application of appropriate descriptive and inferential methods in Statistics, analysis of the data, presentation and interpretation of results of the statistical analysis.
F	Fail	Demonstrates a lack of understanding of fundamental statistical concepts, insufficient knowledge in selection and application of appropriate descriptive and inferential methods in Statistics, and analysis of the data, and poor skills in presentation and interpretation of results of the statistical analysis.

## Final Exam

- Date and time will be announced by the university.
- I will provide you with formula sheets. You do not have to (and are not allowed to) bring your own formula sheets.
- You are allowed to use a **calculator** that **cannot access the internet**. Calculators with internet access (even if you don't use the internet) are prohibited.

## Quizzes

- There will be two quizzes, taking place on **March 23** and **April 18**, respectively.
- The same rules regarding **formula sheets** and **calculators** as for the final exam apply.

## Non-Exam Assessment

- The non-exam assessment category consists of homework assignments and carries a weight of 20%.
- There are weekly homework assignments, generally assigned on Thursdays and due on **Wednesday, at 23:59pm**, the following week. Some exceptions, usually around holidays and exams, apply and will be announced in due course.
- The purpose of these homework assignments is for you to learn and practice the material in class, which is why each homework assignment will be graded as “**pass**” or “**fail**.”
- Recognizing that making mistakes is part of the learning process, we will grade a homework assignment as “pass” if you demonstrate **substantial effort** in solving each of the problems in the homework assignments.
- Examples:
  - If you detail all the steps in your argument but reach a wrong conclusion because of a mistake you make, this counts as “pass.”
  - If you write down the correct answer (e.g., the final result) but do not provide any explanations even if we ask you to, this counts as a “fail.”
  - If you only solve 5 out of 6 questions, this counts as “fail.”
- Fair play: part of the substantial effort criterion is that **you need to handwrite the solutions on paper**. “Handwrite” means **no tablet, no digital submission** (e.g., Word), **no photocopy**, nothing that you could not have done 100 years ago. Afterwards please **scan** and **upload** your solutions to Canvas as a **single pdf file**.
- There is a difference (and I can see that!) between a scan of a handwritten document, which is allowed and encouraged, and a scan of a photocopy of a handwritten document or a document written on a computer or tablet, both of which are not allowed and lead to a “**fail**.”
- Please keep all your handwritten homework papers until the end of the semester. I may ask you to show me your physical homework copies. Failure to produce them, for whatever reason, can lead to a “fail” in the corresponding homework assignment(s).
- A **late** or **missing** homework assignment counts as “fail”. Make sure to check out the lateness policy below.
- You get a “pass” or “fail” for each individual assignment that is due in one week or more after you join this class.
- By default, you will get the **full 20%** for the “Non-Exam Assessment” category. However, if you fail **more than two** homework assignments, every failed homework assignment starting from the third one will cost you **5% of your score**. If you fail 6 or more assignments, you will get 0%. (You won’t get a negative score if you fail 7 or more assignments.)

## Grades

- Grades for homework assignments (pass/fail), quizzes and exams will be communicated via Canvas, within one week for homework assignments and two weeks for everything else.
- If you have any questions about your grades, please **contact the TA within one week** of releasing the grades. We reserve the right to deny regrading requests after one week’s time.
- Regrading requests need to be substantiated and will be considered based on the merit of your own work. In handling a regrading request, we consider the whole quiz/exam, not just a particular question. Marks can go up or down as a result of a regrading request.
- In the rare circumstance where we discover a grading error, we reserve the right to regrade all exams of the class. As a result, your marks can go up or down even if you have not made a regrading request. This is to ensure all marks are solely merit-based.

## Course AI Policy

No restrictions on the use of the internet including generative AI for homework assignments. Do whatever you need to do to understand the course material. However, you will be on your own in quizzes and exams: you can't use anything but your brain for quizzes and exams. You can't use the internet, generative AI or any notes or books except for what I provide to you.

## Lateness Policy

- If you submit homework late, for whatever reason, it counts as “fail”.
- Your homework submission counts as late if **Canvas flags it as late**. Canvas is very strict: If the deadline is 23:59, it might happen that it already flags it as late if you submit at 23:59:01.
- I have seen many reasons why students fail to submit on time: internet failure, falling asleep, forgetting the deadline, mixing up this with another course, traveling (time zone issues), “I submitted on time but Canvas still flags it as late”, mild illness (“headache”, ...), etc.
- Such reasons are already accounted for by the two exceptions you automatically receive. Remember: you can “fail” two homework assignments and still get full marks in the non-exam assessment category.
- Based on past experiences, **submissions by phone are prone to problems**. I don't know why. It's your job to make your assignments appear as on time on my screen. 95% of the students are able to do so without problems. You don't want to belong to the other 5%.
- The only circumstances under which I grant additional exceptions are documented sickness (see below) and other extraordinary circumstances of severe gravity (which will be handled case-by-case).

## Course Materials

- Class slides and other teaching materials available on course Canvas
- A textbook that I will **not** follow very closely: *Statistics for Business Decision Making and Analysis* (2<sup>nd</sup> ed), Robert Stine, Dean Foster, Pearson (2014)
- Required software: **R Studio**

## Academic Integrity

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to [Academic Integrity | HKUST - Academic Registry](#) for the University's definition of plagiarism and ways to avoid cheating and plagiarism.

## Recordings and Attendance

I will record classes and post the recordings. I don't take attendance regularly, but if I notice that attendance drops below 75%, I may decide to stop recording classes.

## Sickness Policy

- If you miss any quiz or exam without prior approval, you will get **0%** for the missed quiz/exam.
- If you fall sick and as a result are going to miss a quiz, the midterm or final exam, you need to do **three things**:
  1. Notify me by e-mail or in person **beforehand** (not after the submission deadline, or after the quiz/exam).
  2. Get a **same-day medical certificate**.
  3. Hand me the **original (not a copy, or scan, or photo) medical certificate** once you're back in class.
- I will not grant deadline extensions or exceptions unless all three steps are followed.

## Questions & Contacting Us

- We operate a Q&A forum on Canvas under **Discussions**.
- If you have any **general interest questions** about the course, go to Canvas Discussions and check whether someone has already asked the same question. If not, post your question and we try to answer your question within 1 business day.
- General interest questions include questions about class material, questions about homework assignments or any question where the answer is beneficial to all students.
- If you have a **personal question**, send an e-mail to the TA first. They will handle your question and involve me, if necessary. This applies to, for example, questions regarding your homework/quiz/exam grading.
- If you have a personal question of high sensitivity, you are welcome to contact me directly via e-mail. Typical examples include severe illness, complaints, known absence from quizzes/exams or issues related to academic integrity.
- **Note:** Do not send me or the TA direct messages on Canvas. We won't receive them.

## Tentative Schedule

Module/Activity	Date	Chapters
Module 1. Overview	Feb 3	1
Module 2. Data and Variation	Feb 3, 5, 10	2, 3, 4
Module 3. Probability	Feb 12, 24, 26, Mar 3	7, 8
Module 4. Discrete Random Variables	Mar 5, 10	9, 11
Module 5. Covariance and Sampling Distribution	Mar 12, 17	12
<b>Quiz 1</b>	<b>Mar 23</b>	
Module 6. Continuous Random Variables	Mar 19, 24, 26	13, 14
Module 7. Confidence Intervals	Mar 31, Apr 2	15
Module 8. Hypothesis Testing	Apr 9, 14, 16	16
<b>Quiz 2</b>	<b>Apr 18</b>	
Module 9. Linear Regression	Apr 21, 23, 25*, May 5	19, 21, 22
Back-up	May 7	

### \* Note:

There will be a special session on Saturday, April 25. This special session will replace the classes on April 28 and 30. There are no classes on April 28 and 30. Details will be announced in due time.