

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

ISOM2500: Business Statistics

Course Outline, Summer 2022

Instructor: Mr. Lupe Chan
Email: shchanai@connect.ust.hk
Office Hours: By appointment

Objective and intended learning outcomes:

The objective of this course is to equip students with the basic knowledge of Statistics with practical real-world business examples and in-class experiments using analytical tools. Students will be able to develop statistical thinking, handle uncertainty in business environment, and gain first-hand experience in data analysis.

Class meets:

Mode of delivery: Mixed-mode (i.e., students participate in a class either in-person or online).
2:00pm - 4:50pm Tue, Thu (Room 1007, LSK Building or through Zoom)

Date: 21 Jun 2022 to 4 Aug 2022

Course materials

- Reference book: Newbold, P., Carlson, W. L., & Thorne, B. (2019). Statistics for Business and Economics (9th Edition). Pearson Education.
- Lecture notes and assignments will be posted on the CANVAS.
- Required software: Excel.

Evaluation

- A midterm Exam (35%): July 19 2022 (Tue), 2:00pm-3:30pm (1.5 hours, in class). Covers materials from session 1 to 7. Short questions format.
- A final exam (45%): Aug 4 (Thur), 2:30pm-4:30pm (2 hours). Mainly covers materials from session 8 to 14, but materials from session 1 to 7 are also required. Short questions format.
- Assignments (20%): Two sets of homework assignments.

Tentative schedule

| Session | Date | Topics | Notes | Reference book |
|---------|--------|--|-------|-----------------|
| 1 | Jun-21 | Describing Data: Graphical | 1 | Chapter 1 |
| 2 | Jun-23 | Describing Data: Numerical | 2 | Chapter 2 |
| 3 | Jun-28 | Probability I | 3a | Chapter 3 |
| 4 | Jun-30 | Probability II | 3b | |
| 5 | Jul-05 | Probability distribution I | 4a | Chapter 4 to 5 |
| 6 | Jul-07 | Probability distribution II | 4b | |
| 7 | Jul-12 | Probability distribution III | 4c | |
| 8 | Jul-14 | Sampling and Sampling distributions I | 5a | Chapter 6 to 8 |
| 9 | Jul-19 | Midterm examination/Sampling and Sampling distributions II | 5b | |
| 10 | Jul-21 | Hypothesis Testing | 6a | Chapter 9 to 10 |
| 11 | Jul-26 | Simple Linear Regression I | 7a | Chapter 11 |
| 12 | Jul-28 | Simple Linear Regression II | 7b | |
| 13 | Aug-02 | Revision | | |
| 14 | Aug-04 | Final examination | | |

Academic integrity:

All students are required to uphold the University's Academic integrity in this course. You are encouraged to study in groups. Nevertheless, no cheating and plagiarism will be tolerated. Any students caught cheating and plagiarism will fail the course.