

ISOM2500 Business Statistics (L3) Fall Semester 2021/22

Course Outline

Instructor

Office Location Office Hours Email Phone Website Dr. Jason MW HO Visiting Assistant Professor of ISOM LSK4082B By appointment <u>imjasonho@ust.hk</u> (852) 3469 2989 <u>https://facultyprofiles.ust.hk/profiles.php?profile=jasonman-wai-ho-imjasonho</u>

Teaching Assistant Email Ms. Stacy DS Deng imsdeng@ust.hk

Class Schedule and Location

Room 2306, 1330 – 1450, every Tuesday and Thursday, 2nd September – 30th November 2021

Course Description and Objectives

The objective of this course is to equip students with basic concepts and methods in statistical thinking and reasoning so that they can handle uncertainty intelligently in business environment effectively. These basis concepts and methods include **descriptive statistics**, **probability**, **statistical inference**, and **linear regression**.

The course adopts the following approaches to meet the objectives:

• Emphasize concepts understanding and results interpretation through different methods of evaluation.

• Closer connection to real life and business practice through new content of lectures.

Course Materials

Recommended Textbook: *Statistics for Business Decision Making and Analysis* (2nd ed), Robert Stine, Dean Foster, Pearson (2014)

Class PowerPoints, and other information posted on the course website on Canvas Required software: Minitab, MS Excel

Assessment

Class participation 5% Assignments 15% [three sets, @5%] Two quizzes 40% [@20%] Final Examination 40%

Details of quizzes:

- 1. Time: 5th October & 4th November 2021, 7:30-8:30pm, LSK G012
- 2. Scope: materials delivered after the previous quiz
- 3. Closed book with a 2-sided A4-size help sheet
- 4. 20 multiple choice questions each

Details of examination:

- 1. Time: **TBA**
- 2. Scope: materials delivered after the previous quiz
- 3. Closed book with a 2-sided A4-size help sheet
- 4. 40 multiple choice questions

Academic Integrity

Without academic integrity, there is no serious learning. Thus, you are expected to hold the highest standard of academic integrity in the course. No cheating, or plagiarism will be tolerated. Anyone caught cheating, or plagiarism will fail the course. Please adhere to the HKUST Academic Honor Code at all time (see http://www.ust.hk/vpaao/integrity/).

Course Schedule	
Module/Activity	Date
Module 1. Data and Variation	Sep 2, 7
Module 2. Association and Dependence	Sep 9
Module 3. Probability	Sep 14, 16
Module 4. Probability Models	Sep 21, 23
Module 5. Covariance and Portfolio	Sep 28
Review of Modules 1-5	Sep 30
Quiz 1 on Modules 1-5	Oct 5, evening
Module 6. Sampling and Sampling Distribution	Oct 7, 12
Module 7. Standard Error and Confidence Interval	Oct 19, 21
Module 8. Hypothesis Testing	Oct 26, 28
Review of Modules 6-8	Nov 2
Quiz 2 on Modules 6-8	Nov 4, evening
Module 9. Fitting Equation to Data	Nov 9, 11, 16
Module 10. Simple Linear Regression	Nov 18, 23, 25
Review of Modules 9-10	Nov 30