

QM241, BUSINESS STATISTICS I 2025 Summer Term (July 7th, 2025 – September 5th, 2025)

TIME OF CLASS Tuesday 2:00 PM - 4:45 PM in room C7-107

Thursday 2:00 PM - 4:45PM in room C7-107

Online MS TEAMS CODE j0iwne5

WORTH 3 credits

PREREQUISITE QM241

WEB-PAGE

INSTRUCTOR Dr. Doan Duy Trung, Email: trung.doanduy@hust.edu.vn

COURSE DESCRIPTION

This course is an introduction to the concepts and methods of descriptive and inferential statistics. The course will cover the following topics: collecting and presenting data, measures of central tendency and dispersion, probability concepts and laws, standard random variables, normal distribution, sampling, statistical estimation, and statistical hypothesis testing.

COURSE OBJECTIVES

Upon completion of the course, the student should:

- Be able to identify, collect, display, and analyze the numerical type of information generated by business operations.
- Understand probability theory and be able to use it for solving problems encountered in business.
- Be able to sample data for drawing inference about the population from which the sample was taken; Be able to perform statistical hypothesis testing.
- Understand how statistical techniques are used to solve real-world problems from Case Study.

TEXT BOOK

Lind, Marchal & Wathen, Statistical Techniques in Business & Economics, 15th edition, McGraw-Hill Irwin (2012).

STUDENT EVALUATION

Attendance: 10%, HW+Exercises: 10% Quizz: 10%, Midterm: 30%, Final exam: 40%

- 1. **Homework:** These are weekly assignments. If you don't show your work, you get a zero. You will be asked (randomly) to present your solutions.
- 2. Quizz: There will be 1 quizz given during the semester.

EXAMINATION FORMAT

Quizzes: 30 minutes; Midterm Exam: 60 - 90 minutes; Final: 90 - 120 minutes.

GRADING SCALE A (90-100), B (80-89), C (70-79), D (60-69), F (<60)

Tentative class schedule

N	Date	Chapter	Topics	Problems	Remark
1	July 10 (Thurs.)	1 2	What is Statistics? Describing Data: Freq. distr. and Graphical Presentation	(pages 45-52)	
2	July 15 (Tues.)	3	Describing Data: Numerical Measure	64, 68, 72, 78, 82, 90 (pages 91-96)	
3	July 17 (Thurs.)	4	Describing Data: Displaying & Exploring Data	28, 30, 32, 34, 36, 38, 40, 42, 47 (pages 126-129)	
4	July 22 (Tues.)	5	Introduction to Probability	50, 52, 54, 58, 60, 62, 66 (pages 174-176)	
5	July 24 (Tues.)		(Cont.)	70, 74, 80, 82, 84, 86, 88, 94 (pages 176-179)	
6	July 29 (Tues)	6	Discrete Probability Distribution	38, 40, 42, 48, 52, 54 (pages 209-212)	
7	July 31 (Thurs.)		(Cont.)	58, 60, 62, 64, 66, 68 (pages 212-214)	
8	Aug. 5 (Tues.)		Q&A		Midterm (Chap 1- 6)
9	Aug. 7 (Thurs.)	7	Continuous Probability Distribution	38, 42, 44, 46, 48, 52 (pages 252-253)	
10	Aug. 12 (Tues.)		(Cont.)	54, 56, 58, 60, 62, 64, 68 (pages 253-255)	
11	Aug. 14 (Thurs.)	8	Sampling methods and Central Limit Theorem	20, 22, 28, 30, 32, 36, 44, 47 (pages 291-295)	
12	Aug. 19 (Tues.)	9	Interval Estimation	32, 38, 44, 46, 48, 54, 56, 60, 62 (pages 324-327)	Quiz (Chap 7- 8)
13	Aug. 21 (Thurs.)	10	Hypothesis Tests	30, 32, 34, 36, 38, 42, 46 (pages 357-359)	
14	Aug. 26 (Tues.)		(Cont.) Final Review Q& A	48, 50, 56, 60, 62, 69 (pages 359-362)	
15	ТВА		Final Exam		Final exam (Chap 1- 10)

CLASS REGULATION: Students are expected to:

- 1. Punctually attend all scheduled classes.
- 2. Be responsible for all instructions and assignments given in class as well as for the supporting textbook content.
- 3. Read the textbook material **before** the lecture covering that material and attempt the suggested problems before the material is covered in class.
- 4. Be an active participant in this class while being respectful of everyone else in the class.
- 5. Turn off cell phones when you enter the classroom. If your cell phone rings during class, you will be asked to leave the class.

<u>ABSENCES:</u> IF YOU MISS MORE THAN TWO CLASSES--EXCUSED OR UNEXCUSED-YOU WILL RECEIVE A FAILING GRADE (grade of "F") FOR THE COURSE.

THIS SYLLABUS IS TENTATIVE AND SUBJECT TO CHANGE. The instructor may make changes if deemed necessary. Changes will be announced in class.