

Statistics (I) 000359061 Syllabus

Fall 2023

A. Instructor Information.

- Instructor: Huang, Tzee-Ming
- Email: tmhuang@nccu.edu.tw
- Office hours: Monday 8:00-10:00 and by appointment

B. Textbook and reference.

- Textbook. Statistical Techniques in Business and Economics (19th Edition) by Douglas A. Lind, William G. Marchal, and Samuel A. Wathen.
- Reference. 統計學, 趙民德/李紀難編著. ISBN 957-483-337-2

C. Course Objectives. The main objective of this course is to help students develop basic understanding of statistics. Fundamental concepts such as samples and populations, random variables and probability distributions, will be introduced. The second objective is to prepare students for more advanced studies in statistics. For this purpose, more mathematical tools may be introduced if necessary.

D. Grading Policy.

- Optional work: $x\%$, where $0 \leq x \leq 30$ is determined by homework scores.
- Midterm: $(50 - 0.5x)\%$
- Final: $(50 - 0.5x)\%$

E. Tentative Class Schedule.

Week	Content	Reading chapter(s)
1	Introduction to statistics	1
2 – 4	Data description	2-4
5 – 6	Probability concepts	5
7	Discrete probability distributions	6
8	Continuous probability distributions	7
9	Midterm	
11	Continuous probability distributions	7
12	Sampling methods	8
13	Central limit theorem	8
14 – 15	Estimation and confidence intervals	9
16 – 17	One-sample tests of hypothesis	10
18	Final	

- The topics in the above tentative class schedule are subject to modification. Up-to-date reading schedule will be posted after the class starts on the course web site at

<https://stat.walkup.tw/teaching/statistics/F23/homepage.html>

F. Expected time for studying outside class. Students are expected to spend 3–6 hours on this course (for reviewing/previewing the course material) outside class every week.