Mathematical Statistics I 304026001 Syllabus

Spring 2026

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. Introduction to Mathematical Statistics (8th Edition) by Hogg, McKean, and Craig.

- Reference. Introduction to Probability and Mathematical Statistics by Bain.

C. **Grading Policy.**

- Optional work: $x\%$, where $0 \leq x \leq 30$ is determined by homework scores.

- Midterm Exam: $(50 - 0.5x)\%$

- Final Exam: $(50 - 0.5x)\%$

D. **Note.**

- Homework problems will be posted on the course web site every week after the class starts. The course web site is at

    https://stat.walkup.tw/teaching/math_stat_under/S26/homepage.html

- The Midterm Exam and Final Exam are closed book and closed notes exams.

- Most exam problems are modified from basic homework problems.

E. **Tentative Class Schedule.**

Week	Content	Reading chapter(s)
1	Holiday	
2	Probability and Distributions (Sec. 1.1–1.3)	1
3	Probability and Distributions (Sec. 1.4, 1.5)	1
4	Probability and Distributions (Sec. 1.6, 1.7)	1
5	Probability and Distributions (Sec. 1.8, 1.9)	1
6	Holiday	
7	Multivariate Distributions (Sec. 2.1)	2
8	Midterm Exam	
9	Multivariate Distributions (Sec. 2.2)	2
10	Holiday	
11	Multivariate Distributions (Sec. 2.3, 2.4)	2
12	Multivariate Distributions (Sec. 2.5, 2.6)	2
13	Multivariate Distributions (Sec. 2.7, 2.8)	2
14	Some Special Distributions (Sec. 3.1, 3.2)	3
15	Some Special Distributions (Sec. 3.3, 3.4)	3
16	Final Exam	

- 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/math_stat_under/S26/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.