

Mathematical Statistics 354003002 Syllabus

Spring 2015

A. **Instructor Information.**

- Instructor: Huang, Tzee-Ming
- Email: tmhuang@nccu.edu.tw
- Office hours: to be arranged

B. **Textbook.** Mathematical Statistics by Jun Shao.

C. **Course Objectives.** This two-semester course will focus on frequentist Statistics, Bayesian Statistics, and recently developed statistical methodologies from a theoretical perspective. Students will be trained in a mathematically rigorous fashion and are expected to develop the ability of deriving theoretical results for their future research after completing this course.

D. **Grading Policy.**

- Homework: 100%

E. **Additional Information.**

- The topics in the content column of the class schedule are subject to modification.

Tentative Class Schedule

Week	Content	Chapter(s)
1	U-statistics	3
2	V-statistics	3
3	Bayesian Estimation	4
4	Bayesian Estimation	4
5	Minimax and Admissibility	4
6	Minimax and Admissibility	4
7	Asymptotic Efficient Estimation	4
8	Asymptotic Efficient Estimation	4
9	Asymptotic Efficient Estimation	4
10	UMP tests	6
11	UMPU tests	6
12	UMPI tests	6
13	Tests in Parametric models	6
14	Tests in Parametric models	6
15	To be announced	
16	To be announced	
17	To be announced	
