YUAN ZE UNIVERSITY

CM002 G - Fundamental Computer Programming–Statistical and Quantitative Analysis

Year: 2025

Instructor: **Dien Giau Bui (Richard)**

CONTACT: Dien Giau Bui (Richard)

- Office hour: every Wednesday morning, 9:00–12:00, R60705. Please send me an email to book in advance.
- Email: **buidiengiau@saturn.yzu.edu.tw**, please specify in email subject: [CM002]. For example: *[CM002] Your question subject*.
- TA Contact: TBA, email: TBA

COURSE OUTLINE

Course Description

This course is for undergraduate students who have a basic coding background (CM001 or CP121) and are interested in intensifying their analytical skills for statistical analysis and reporting. After finishing the class, the students can understand basic data manipulation, statistical analysis, and data reporting.

The class can be classified into three main modules:

- Data cleaning
- Statistical tests
- Reporting

Textbook

The elective reading for the course is:

- "R for Data Science," 2th Edition by Hadley Wickham et al. 2023 [**R4DS**]

Materials

Will be upload to this website frequently:

https://github.com/diengiau/cm002

If you want to download the materials to your laptop/PC, you can click to the green button Code and Download as ZIP file.

Grading

Category	Percentage	Note
Quiz 1	20%	Random time
Quiz 2	20%	Random time
Midterm	40%	Week 8
Final Project	20%	Week 17-18

Note that on quiz and exam days, ==**the students need to seat according to the arrangement of the professor or TA**==. All the score in this class is individual work.

Schedule (==flexible to change==)

Week	Topic	Reading & Note
1	Course Introduction + Introduction about data	
2	No class	Holiday 2/28
3	Clean data	Make up 1 hour
4	Clean data (cont)	Make up 1 hour
5	Clean data (cont)	
6	No class	Will make-up class on Week 3 and 4
7	No class	Holiday Tomb Sweeping Day
8	**Midterm Exam**	
9	Statistical tests	
10	Statistical tests (cont)	
11	Statistical tests (cont)	
12	Statistical tests (cont)	
13	Reporting and Visualization	

14	Visualization (cont)	
15	No class	Holiday Dragon Boat
16	Introduce about how to do final project	
17	Independent Study	
18	Independent Study + Submit Final Project	

Independent Study

In Week 17&18, the students need to learn independently by yourself by reading the materials and videos at home. Then, the students need to finish one assignment as the final project by Week 18 via Portal. **On Week 18, we will have one online class in MS Team** so that the students briefly present to me your final project/assignment. The results of this final project will account for 20% of the final score.

Notes:

- Don't use not-related electronic devices (including headphones or earphones) without permission.

- Materials for this independent study will be posted to students on Week 16.

- If the students have any questions, students can contact me by emails or book a meeting via emails so that we can meet in person.