### YUAN ZE UNIVERSITY

# CM002 G Fundamental Computer Programming-Statistical and Quantitative Analysis

Year: 2024

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   | 30%        | Random time |
| Quiz 2   | 30%        |             |
| Quiz 3   | 40%        |             |

# Schedule (flexible to change)

| Week | Topic                            | Reading & Note     |
|------|----------------------------------|--------------------|
| 1    | Course Introduction + Clean data |                    |
| 2    | No class                         | Will make-up class |
| 3    | No class                         | Will make-up class |
| 4    | Clean data (cont)                | Make up 1 hour     |
| 5    | Clean data (cont)                | Make up 1 hour     |
| 6    | Clean data (cont)                | Make up 1 hour     |
| 7    | Official Holiday                 |                    |
| 8    | Clean data (cont)                | Make up 1 hour     |
| 9    | Quiz 2                           |                    |
| 10   | Statistical tests                |                    |
| 11   | Statistical tests (cont)         |                    |
| 12   | Statistical tests (cont)         |                    |
| 13   | Statistical tests (cont)         |                    |
| 14   | Statistical tests (cont)         |                    |
| 15   | Reporting                        |                    |
| 16   | Reporting (cont)                 |                    |

| 17 | Reporting (cont) |  |
|----|------------------|--|
| 18 | Quiz 3           |  |