Research Methods in Social Psychology

Room: TBA
Time: Thursday 10:15–13:00

Instructor: Dr. Ken Fujiwara
Email address: psykf@ccu.edu.tw
Office: 418
Telephone: 32205
Office hours: By appointment

Course objectives:

At the end of this course, students will be able to:

1. Design (and conduct) data collection in the context of social psychological research.
2. Perform statistical analysis on the data with R.
3. Report the results according to the APA's guideline.
4. Provide an oral presentation of the statistical analysis used in the project.

Required text:

No particular specification. The course material is delivered by the instructor.

Data Analysis:

Students will learn the basic principle of data analysis common in social psychology, including *t*-test, ANOVA, correlation, regression, mediation, SEM, and HLM. The effect size and the way to determine the sample size are also covered. Time series analysis of nonverbal synchrony may be included depending on the progress of the class. The students practice those analyses using *R*. They will also learn how to report the results in APA style and make a report at the end of the first half.

***Mid-term*:**

Students will take a quiz in order to assess the level of understanding about and research methods and statistical analysis with *R*.

Group Work, Principal Investigator, Oral Presentation:

In the second half, the students will work on a group project of actual/imaginary research where they collect and analyze data. They should act as a principal investigator (P.I.) of the project at least once during the semester. As a P.I., the student will be responsible for designing and conducting data collection.
The students will collect actual data if possible, but if not, they will use the Open Science Framework to "collect" data from previous studies of interest. In any cases, the group (mainly the P.I.) will make an oral presentation of the research project, which will include introduction, methods, results, and discussion, followed by Q & A time. Especially, they should instruct the details of the statistical analysis used in the study and provide its *R* code, such that all the students can replicate the analysis.

Grades:

Class Attendance and Participation 30%; Presentation 30%; Report 20%;
Mid-term 20%

Tentative Course Outline

Week	Topic	
1	Introduction	
2	Developing Research Ideas and Hypothesis How to use *R*	
3	Descriptive Statistics *t*-test	
4	ANOVA Factorial Designs	
5	Effect size Sample size determination	
6	Correlation Regression (lm, glm)	
7	Mediation SEM HLM	
8	How to report the results in APA style	
9	<u>**Mid-term**</u>	
10	Time series analysis of nonverbal synchrony	
11	How to make an effective oral presentation	
12	Oral Presentations	
13	Oral Presentations	
14	Oral Presentations	
15	Oral Presentations	
16	Oral Presentations	
17		
18		