

## Research Methods

Fall, 2023

~~~Tentative subject to change~~~

Class Time: Tuesday 13:20-16: 20

Location: HSS/B304

Instructor: Huifen Lin

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Office: HSS C630

Office hours: by appointment

Learning management platform: [elearn.nthu.edu.tw](http://elearn.nthu.edu.tw)

### Course description

This course is an introductory course in research methodology and it aims to develop graduate students' abilities in conducting research in areas such as second/foreign language acquisition, computer-assisted language learning/teaching and general behavioral and social sciences. Basic skills and approaches to conduct experimental/non-experimental research will be introduced with a pedagogical focus. The instructor will guide students step by step from selecting a research topic, reviewing relevant literature, designing research method, collecting data to the end of putting together a research proposal. Each research method will be introduced by reference to studies using that method. It has to be noted that data-analysis and qualitative research paradigm will not be covered in this class due to time constraint.

### Student learning outcomes

Upon completion of this course, students will be able to do the following:

1. Conduct a literature search and write a review on a research topic
2. Define and design important terms related to experimental designs.
3. Design a research study and determine an appropriate method of investigation
4. Apply concepts and theories they learn in class to develop a research project
5. Be familiar with research methodology and tools in second language studies
6. Critically evaluate a published research study
7. Learn to write a research proposal in APA style

### Required Textbook

Jhangiani, R. S., Chiang, I. C. A., Cuttler, C., & Leighton, D. C. (2019). *Research methods in psychology*. Kwantlen Polytechnic University.

**NOTE:** This is an online, open text that is free of charge to you. Textbook chapters are available online in the learning management platform. You could also download the book [here](#).

## **Assessments**

Your grade will be determined on the basis of your performance of the following assignments/activities:

### ***Annotated bibliography of at least 15 studies on a selected topic-20%***

Once selecting a topic for your research project, you are encouraged to review studies on that topic. This assignment requires that you review at least 15 studies, create an annotated bibliography and write a summary of the studies, which should then lead to the gaps of previous studies that you intend to fill and the research questions of your study.

### ***Midterm exam-20%***

There will be multiple-choice and short essay questions in the midterm exam. The exam questions will come from the textbook and supplementary materials covered in class.

### ***Chapter exercises-20%***

There will be five exercises during the course. Each exercise will cover one or more than one chapter. The exercise is to assess your comprehension of the material as well as to provide a hands-on opportunity to apply the knowledge into practical use. Each exercise is due every Saturday at midnight, preceding our class meeting.

### ***Presentations-10%***

You will give three presentations, the first one on your literature review, second one on research design and third one on research project. Each presentation will be followed by my feedback and your peer's questions. You would incorporate these feedbacks into your final research project.

### ***Peer feedback-10%***

During the course, you will be asked to evaluate your peer's work and provide suggestions/feedback both in oral and written form.

### ***Research project-20%***

You will write a 10-15-page research project, including references and appendices. The research project should be prepared in APA (6th edition) format. Three major components are Introduction, Literature review and Methodology. Each major section should include relevant details. Full details of the research project will be announced in class.

## Course schedule

| Week # | Date  | Topic                                                                                            | Due                            |
|--------|-------|--------------------------------------------------------------------------------------------------|--------------------------------|
| 1      | 9/12  | Course introduction<br>What is research                                                          |                                |
| 2      | 9/19  | <b>Chapter II.</b> Overview of the Scientific Method                                             | Talk about your research topic |
| 3      | 9/26  | How to conduct literature review                                                                 |                                |
| 4      | 10/3  | How to conduct literature review- continued                                                      | Annotated bibliography         |
| 5      | 10/10 | No class                                                                                         |                                |
| 6      | 10/17 | <b>Literature review presentation</b>                                                            | Peer feedback I                |
| 7      | 10/24 | <b>Chapter IV.</b> Psychological Measurement                                                     | Chapter exercise 1             |
| 8      | 10/31 | <b>Chapter V.</b> Experimental Research                                                          | Chapter exercise 2             |
| 9      | 11/7  | <b>Chapter IX.</b> Factorial Designs<br>Chapter X. Single-Subject Research                       | Chapter exercise 3             |
| 10     | 11/14 | Midterm exam                                                                                     |                                |
| 11     | 11/21 | <b>Chapter VI.</b> Non-Experimental Research<br><b>Chapter VIII.</b> Quasi-Experimental Research | Chapter exercise 4             |
| 12     | 11/28 | <b>Methodology presentation</b>                                                                  | Peer feedback II               |
| 13     | 12/5  | <b>Chapter VII.</b> Survey Research                                                              | Chapter exercise 5             |
| 14     | 12/12 | <b>Chapter XI.</b> Presenting Your Research                                                      |                                |
| 15     | 12/19 | <b>Research project presentation</b>                                                             | Peer feedback III              |
| 16     | 12/26 | Wrap up                                                                                          | Research project due           |