Research Methods

Fall, 2022

Class Time: Tuesday 13:20-16: 20

Location: HSS/B304 Instructor: Huifen Lin

Email: huifennthu@gmail.com

Office: HSS C630

Office hours: by appointment

Learning management platform: 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 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. Students are encouraged to take qualitative research method and statistics courses offered in this or other universities.

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. Design a research study and determine an appropriate method of investigation
- 3. Apply concepts and theories they learn in class to develop a research project
- 4. Be familiar with research methodology and tools in second language studies
- 5. Critically evaluate a published research study
- 6. 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 (4th American edition)*. 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 (elearn.nthu.edu.tw). You could also download the book here.

Assessments

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

Literature review 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 literature review 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. You would use MAXQDA, a data-analysis software, to download, highlight and code documents that later could be integrated to complete your literature review. Also, an endnote file should be created for the studies you reviewed.

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 several exercises throughout the course. Each exercise will cover one or more chapters. 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 two presentations, the first one on your literature review, second one on your research proposal. Each presentation will be followed by my feedback and your peer's questions. You would incorporate these feedbacks into your final research proposal.

Peer feedback-10%

You will be asked to evaluate your peer's work and presentation and provide suggestions/feedback both in oral and written form.

Research proposal-20%

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

Course schedule

| Week# | Date | Topic | Activity/Assignments |
|-------|-------|--|--|
| 1 | 9/13 | Course introduction | Talk about your research interest |
| 2 | 9/20 | Chapter I. The Science of Psychology Chapter II. Overview of the Scientific Method | Chapter exercise |
| 3 | 9/27 | How to conduct literature review Endnote Workshop | Please register: http://pesto.lib.nthu.edu.tw/libto |
| | | Time: 12:10-14:00 Venue: 南大校區計中電腦教室 | ur/libtour.php |
| 4 | 10/4 | How to conduct literature review-continued | |
| 5 | 10/11 | Chapter III. Research Ethics Chapter IV. Psychological Measurement | Chapter exercise |
| 6 | 10/18 | Chapter V. Experimental Research | Chapter exercise |
| 7 | 10/25 | Chapter VI. Non-Experimental Research | Chapter exercise |
| 8 | 11/1 | Literature review presentation | Peer feedback I |
| 9 | 11/8 | Midterm exam | |
| 10 | 11/15 | Chapter VII. Survey Research | Chapter exercise |
| 11 | 11/22 | Chapter VIII. Quasi-Experimental Research | Chapter exercise |
| 12 | 11/29 | Chapter IX. Factorial Designs | Chapter exercise |
| 13 | 12/6 | Chapter X. Single-Subject Research | Chapter exercise |
| 14 | 12/13 | Chapter XI. Presenting Your Research | |
| 15 | 12/20 | Research proposal presentation | Peer feedback II |
| 16 | 12/27 | No class | Research proposal due |