# 國立清華大學課程大綱

# 【尊重智慧財產權,請使用合法教科書,不得非法影印!】

課程名稱	中文:教育研究法		必/選修	選修
	英文: Research Methods in Education		課程類別	系專業
開課單位	竹師教育學院	特殊教育學系	開課年級/學 期(上、下)	三年級
學分數	2		上課時數	2
先修課程	無			

## 課程概述:

This course aims to provide an introduction to educational research designs. The first set of sessions provides the background and framework for understanding the reasoning behind different research designs. The second sessions focus on various types of research methods and the data analyses that are appropriate for these designs. When completing this course, students will be able to understand and evaluate educational research. This course will be taught in English.

注意:因應 COVID 疫情,本課網及上課地點、方式將會依循清華大學之上課指引進行彈性 修改。故本課網保留因疫情修改的彈性。

由於正式課程開始於第一堂課,故學生若缺席第一堂課者恕無法加簽!

課程內容:(18 週的課程規劃,條列式,表格式皆可)

Date	Topic	Readings	<b>Assignment Due</b>
1 (2/16)	Introduction to Educational Research	Ch 1-2	
	1.Research Design: Purpose and Principals		
	2. Research Ethics		
2 (2/23)	How to select and define a research	Ch 3-4	
	problem?		
	Search and locate literature		
3 (3/2)	How to evaluate a study 1	Ch 23	
	Introduction of different variables		
4 (3/9)	How to evaluate a study 2		
	1. Internal and Statistical Conclusion Validity		
	2. Construct and External Validity		
5 (3/16)	How to select a sample and collect data?	Ch 6-7	
	How to select measurements?		
6 (3/23)	How to write a research proposal?	Ch 5	
7 (3/30)	Mid-Term Exam		Proposal Abstract
8 (4/6)	校際活動週 (當天停課。將協商課程時間)	Ch 8-9	
	Descriptive & Exploratory Research:		

	Survey Research and Analysis		
	Correlational Research and Analysis		
9 (4/13)	Literature review & discussion (student	Assigned	Group Presentation 1
	presentation):	articles	
	Descriptive & Exploratory Research		
10 (4/20)	Causal-Comparative Research and Analysis	Ch 10-11	
	Experimental Research and Analysis		
11 (4/27)	Literature review & discussion (student	Assigned	Group Presentation 2
	presentation):	articles	& 3
	Causal-Comparative Research and Analysis		
	Experimental Research and Analysis		
12 (5/4)	Qualitative Research and Analysis 1	Ch 13	
	Narrative research		
13 (5/11)	Qualitative Research and Analysis 2	Ch 14	
	Ethnographic research		
14 (5/18)	Literature review & discussion (student	Assigned	Group Presentation 4
	presentation):	articles	
	Qualitative Research and Analysis		
15 (5/25)	Single-Subject Research and Analysis	Ch 12	
16 (6/1)	Literature review & discussion (student	Assigned	Group Presentation 5
	presentation):	articles	Small Proposal
	Single-Subject Research and Analysis		

#### 教學方式:

Lecture 40%; class discussion: 40%; oral presentation on literature evaluation: 20%

## 評量方式:

#### 1. Class Attendance and Participation (20%).

- a. Student attendance and class participation are the basic requirements in this course. Students are expected to attend EVERY class on time. If there are any emergencies or reasonable reasons for absence, students should email Prof. Wong or Prof. Chung with an explanation. Not informed absence will lead to a grade decrease in class participation (5 for each absence).
- b.If you are not able to attend any classes because you are going to attend any academic conferences or presentations, please inform Prof. Wong or Prof. Chung ahead of time (two weeks before your presentation). We will arrange a time for you to practice your presentation at class. If you are not going to present, please submit a two-page single space written reflection to Prof. Wong or Prof. Chung one week after the class. Then attending academic conferences or presentations will not be considered as an absence.
- c. Students are expected to read the required materials and be prepared for classes.
- d.Every student should speak up in class at least ONE TIME to acquire the class participation score (1 point for each class). Actively participating in class discussions is particularly critical for learning the central concepts and skills for this course. In lectures, asking questions, responding to the lecturer, and perspective sharing demonstrate students'

understanding of class contents and clinical applications.

e. In the literature research & discussion classes, students should read the assigned articles and rate the studies based on the literature evaluation form BEFORE class. Students should also actively participate in class discussions when their peers lead the conversation about the research quality of the assigned study.

## 2. Proposal abstract (10%).

Write a 1.5-to-2-page paper to explain your developing research aims and research questions (Single Space, Times New Roman, Arial or 標楷體). On that page, you will (1) provide a brief background of the study, (2) identify the gaps between the current education practice or research, (3) describe the research aims and research questions, and (4) state the importance or significance of the study. Please upload your assignment online to the e-Learn system: <a href="https://elearn.nthu.edu.tw">https://elearn.nthu.edu.tw</a> before the class starts. Please upload your assignment online to the e-Learn system: <a href="https://elearn.nthu.edu.tw">https://elearn.nthu.edu.tw</a> before the class starts (3/30/2022).

#### 3. Mid-term exam (30%).

Being absence without informing Prof. Wong before the exam is not acceptable. Being late for more than 15 minutes will not be able to participate in the exam. **No make-up exam is allowed** if students are late or absence without a good reason or not informing Prof. Wong ahead of time.

### 4. Group presentation on literature evaluation (20%)

Students at the class will be divided into 5 groups. Every group will select one research design topic and find a published article in the education field that adopted the associated research design to review. **Two weeks before the presentation**, you will send the article(s) that you select to Prof. Chung to acquire her permit. **One week before the presentation**, you will send the article to your peers for them to review. In the presentation, you will briefly introduce the research to your peers (15 minutes) and lead the class discussion to identify the strengths and weaknesses of the study design (15 minutes).

#### 5. Small proposal (20%)

For your small project, you will include: abstract (1 page), introductory statement & background (2 pages), research problem & rationale (0.5 pages), data collection plan (0.5 pages), and data analysis plan (0.5 pages). The length of the proposal should no more than 6 pages (Single Space, Times New Roman, Arial or 標體). Please upload your assignment online to the e-Learn system: <a href="https://elearn.nthu.edu.tw">https://elearn.nthu.edu.tw</a> before the class starts (6/1/2022).

#### Note

- 1. The exam will be designed in **English**. Your oral presentation should be in **English**, but you can use **Chinese** to lead the class discussion.
- **2.** Literature should be cited in APA format.
- 3. All assignments must be submitted on time. Late assignments will be accepted only in extremely unusual circumstances, on a case-by-case basis, and only with pre-arranged permission. Should an unusual and unforeseen circumstance arise that may interfere with the completion of the final project on time, contact Prof. Wong or Prof. Chung promptly so that your request for special accommodations can be considered. Late projects submitted without prior permission to do so will not be accepted.

為達學習成效,授課教師對本教學大綱保留修改的彈性。有任何建議也歡迎學生及時提出討 論。

## 教科書及參考書目:

- 1. Mills, G. E. & Gay, L. R. (2019). Educational research: Competencies for analysis and application (12th ed.). Upper Saddle River, NJ: Pearson. ISBN 9780132613170
- 2.王文科、王智弘 (2020):教育研究法(19版)。台北:五南。
- 3.葉重新(2017):教育研究法(第三版)。台北:心理。

#### 素養指標:

【專業素養1】了解教育發展的理念與實務

- 1-1 了解有關教育目的和價值的主要理論或思想,以建構自身的教育理念與信念、
- 1-2 敏銳覺察社會環境對學生學習影響,以利教育機會均等
- 1-3 了解我國教育政策、法規及學校實務,以作為教育實踐基礎

【專業素養2】了解並尊重學習者發展與學習需求

2-1 了解並尊重學生身心發展、社經及文化背景的差異,以作為教學與輔導的依據

【專業素養4】建立正向學習環境並適性輔導

4-1 應用正向支持原理,共創安全、友善及對話的班級與學習環境,以養成學生良好品格及有效學習

#### 核心內容:

【專業素養1】了解教育發展的理念與實務

(1)一般教育與特殊教育的發展趨勢、(2)國內外一般教育與特殊教育的重要議題及其影響、(3) 我國一般教育與特殊教育的主要法規與重要政策

【專業素養2】了解並尊重學習者發展與學習需求

(1)特殊教育學生的身心特質與學習需求

【專業素養4】建立正向學習環境並適性輔導

(5)學生自主學習與自我決策

融入議題:性別平等教育、環境教育、生涯規劃教育、國際教育、新移民教育、理財教育另類教育