

課程名稱	健康研究法原理及應用 Principle and Application in Health Research Methods
開課學期	108-2
授課對象	公共衛生學院
授課教師	陳保中
課號	MGH7024
課程識別碼	853 M0240
班次	
學分	3.0
全/半年	半年
必/選修	選修
上課時間	星期三 6,7,8(13:20~16:20)
上課地點	公衛 105
備註	本課程以英語授課。全球組博班必修。與楊銘欽、蕭朱杏、簡國龍、林先和合授 總人數上限：12 人
Ceiba 課程網頁	
課程簡介影片	
核心能力關聯	
課程大綱	
為確保您我的權利,請尊重智慧財產權及不得非法影印	
課程概述	The module will be delivered over one semester, as a blend of small group work and lectures, practical exercises, group project, presentation and in-class discussion of reading tasks. 課程將會以講課、分組討論、演練、小組報告、指定閱讀討論進行授課。

課程目標	The aim of this course is to introduce concepts of study design, data collection and statistical analysis commonly used in public health research with a strong focus in global health. 課程目標為介紹公共衛生研究常用到的實驗設計、資料收集和統計分析方法。上課內容會特別偏重這些研究工具在全球衛生研究的應用。																			
課程要求	<div>1. Active participations in the discussion and presentation of reading tasks are requirements for all students.</div> <div>2. On the completion of this course, students will identify a specific research topic related to global health and use the skills and knowledge taught in the course to undertake a critical review of the literature relating to the identified research topic/problem, design a study to investigate the problem, and write an appropriate protocol for conducting a research project on the topic, including ethical aspects of their research.</div> <div>3. For the mid-term presentation, each student is required to do a 15-minutes presentation on her/his identified research topic. The content of presentation should include a preliminary report of background, literature search strategy and research hypotheses.</div> <div>4. For the final presentation, each student is required to do a 15-minutes presentation on her/his research proposal for the identified topic. The content of presentation should include a report of background, literature review, research hypotheses, study design and statistical methods.</div> <div>5. Each student is required to submit a final written report in the format of a research project proposal, including project title and sections on research background, literature review, materials and methods, and expected outcomes.</div>																			
Office Hours	每週三 16:30~17:20																			
參考書目	<div>Required textbook:</div> <div>1. Jacobsen, Kathryn H (2012) Introduction to Health Research Methods: A Practical Guide. Sudbury, Massachusetts: Jones & Bartlett Learning.</div> <div>Suggested reading:</div> <div>2. Bowling, Ann (2009) Research Methods in Health: Investigating Health and Health Services New York, NY: McGraw Hill/Open University Press.</div> <div>3. Ogden, Thomas E (2002) Research Proposals: A Guide to Success. San Diego, Calif. : Academic Press.</div>																			
指定閱讀	Supplementary material will be distributed during the class .																			
評量方式 (僅供參考)	<table><tr><th>No.</th><th>項目</th><th>百分比</th><th>說明</th></tr><tr><td>1.</td><td>Final written report</td><td>50%</td><td></td></tr><tr><td>2.</td><td>Final presentation</td><td>20%</td><td></td></tr><tr><td>3.</td><td>Mid-term presentation</td><td>20%</td><td></td></tr></table>				No.	項目	百分比	說明	1.	Final written report	50%		2.	Final presentation	20%		3.	Mid-term presentation	20%	
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1.	Final written report	50%																		
2.	Final presentation	20%																		
3.	Mid-term presentation	20%																		

4.	Class participation	10%
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課程進度			
週次	日期	單元主題	對應核心能力
第 1 週	02/20	Introduction to the course & Identifying a Study Question /Prof. Pau-Chung Chen	
第 2 週	02/27	Cross-Sectional Surveys: Rationale, Design, and Data Collection/Prof. Pau-Chung Chen	
第 3 週	03/06	Introduction to systematic review and meta-analysis/ Prof. Pau-Chung Chen & TA	
第 4 週	03/13	Scientific Writing for Proposals/ Pau-Chung Chen	
第 5 週	03/20	Cohort Studies: Rationale, Design, and Data Collection/Prof. Kuo-Liong Chien	
第 6 週	03/27	Evaluation of health service: Rationale, Design, and Data Collection/Prof. Ming-Chin Yang	
第 7 週	04/03	Spring recess	
第 8 週	04/10	Case-Control Studies: Rationale, Design, and Data Collection/Prof. Pau-Chung Chen	
第 9 週	04/17	Experimental Studies: Rationale, Design, and Data Collection/Prof. Kuo-Liong Chien	
第 10 週	04/24	Miscellaneous Types of Studies: Ecological Studies, Case Series, Qualitative Studies, and Systematic Reviews and Research Ethics / Pau-Chung Chen	
第 11 週	05/01	Data Analysis: Data Management, Descriptive Analysis, and Comparative Statistics/Prof. Chuhsing Kate Hsiao	
第 12 週	05/08	Data Analysis: Advanced Statistics/Prof. Chuhsing Kate Hsiao	
第 13 週	05/15	Students' Mid-Term Presentation	
第 14 週	05/22	Completing a Full Proposal/Prof. Pau-Chung Chen	
第 15 週	05/29	How to review a proposal	
第 16 週	06/05	Poster and Oral Presentations/Prof. Pau-Chung Chen	
第 17 週	06/12	Student' s Presentation	

系所 CEPH 核心能力

D17-1	Explain public health history, philosophy and values 解釋公共衛生史，哲學和價值觀
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D17-2	Identify the core functions of public health and the 10 Essential Services* 辨別公共衛生和 10 項基本服務的核心職能
D17-3	Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health 解釋定量和定性方法和科學在描述和評估人口健康方面的作用
D17-4	List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program 列出美國或與學校或計劃相關的其他社區的發病率和死亡率的主要原因和趨勢
D17-5	Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc. 討論人口健康中的一級，二級和三級預防科學，包括健康促進，篩檢等
D17-6	Explain the critical importance of evidence in advancing public health knowledge 解釋實證在推進公共衛生知識方面的重要性
D17-7	Explain effects of environmental factors on a population's health 解釋環境因素對人口健康的影響
D17-8	Explain biological and genetic factors that affect a population's health 解釋影響人口健康的生物和遺傳因素
D17-9	Explain behavioral and psychological factors that affect a population's health 解釋影響人口健康的行為和心理因素
D17-10	Explain the social, political and economic determinants of health and how they contribute to population health and health inequities 解釋健康的社會，政治和經濟決定因素以及它們如何促進人口健康和健康不公平
D17-11	Explain how globalization affects global burdens of disease 解釋全球化如何影響全球疾病負擔
D17-12	Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health) 解釋人類健康，動物健康和生態系統健康之間關係的生態學觀點（例如，共享健康）
MGH Concentration Competencies (adopted from ASPPH MPH in Global Health)	
1	Analyze the roles, relationships, and resources of the entities influencing global health
2	Apply ethical approaches in global health research and practice
3	Apply monitoring and evaluation techniques to global health programs, policies, and outcomes
4	Propose sustainable and evidence-based multi-sectoral interventions, considering the social determinants of health specific to the local area
5	Design sustainable workforce development strategies for resource-limited settings
6	Display critical self-reflection, cultural humility, and ongoing learning in global health