

<b>Course Information</b>	
Course title	Principle and Application in Health Research Methods
Semester	104-2
Designated for	COLLEGE OF PUBLIC HEALTH Graduate Institute of Epidemiology and Preventive Medicine
Instructor	WEI-JANE CHEN
Curriculum Number	EPM8003
Curriculum Identity Number	849 D0400
Class	
Credits	3
Full/Half Yr.	Half
Required/Elective	Required
Time	Wednesday 678
Remarks	The upper limit of the number of students: 12.
Ceiba Web Server	<a href="http://ceiba.ntu.edu.tw/1042EPM8003_">http://ceiba.ntu.edu.tw/1042EPM8003_</a>
Table of Core Capabilities and Curriculum Planning	Association has not been established
<b>Course Syllabus</b>	
<b>Please respect the intellectual property rights of others and do not copy any of the course information without permission</b>	
Course Description	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.
Course Objective	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.
Course Requirement	<ol style="list-style-type: none"> <li>1. Active participations in the discussion and presentation of reading tasks are requirements for all students.</li> <li>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.</li> </ol>

	<p>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.</p> <p>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.</p> <p>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.</p>																						
Office Hours	Every Wednesday 16:30~17:20																						
References	<p>Required textbook:</p> <p>1. Jacobsen, Kathryn H (2012) Introduction to Health Research Methods: A Practical Guide. Sudbury, Massachusetts: Jones &amp; Bartlett Learning.</p> <p>Suggested reading:</p> <p>2. Bowling, Ann (2009) Research Methods in Health: Investigating Health and Health Services New York, NY: McGraw Hill/Open University Press.</p> <p>3. Ogden, Thomas E (2002) Research Proposals: A Guide to Success. San Diego, Calif. : Academic Press.</p>																						
Designated reading	Supplementary material will be distributed during the class																						
Grading	<table border="1"> <thead> <tr> <th>No.</th> <th>Item</th> <th>%</th> <th>Explanations for the conditions</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Class participation</td> <td>10%</td> <td></td> </tr> <tr> <td>2.</td> <td>Mid-term presentation</td> <td>20%</td> <td></td> </tr> <tr> <td>3.</td> <td>Final presentation</td> <td>20%</td> <td></td> </tr> <tr> <td>4.</td> <td>Final written report</td> <td>50%</td> <td></td> </tr> </tbody> </table>			No.	Item	%	Explanations for the conditions	1.	Class participation	10%		2.	Mid-term presentation	20%		3.	Final presentation	20%		4.	Final written report	50%	
No.	Item	%	Explanations for the conditions																				
1.	Class participation	10%																					
2.	Mid-term presentation	20%																					
3.	Final presentation	20%																					
4.	Final written report	50%																					
<b>Progress</b>																							
Week	Date	Topic																					
Week 1	02/24	Introduction to systematic review and meta-analysis (Hsien-Ho Lin)																					
Week 2	03/02	Identifying a Study Question/Prof. Wei J. Chen																					
Week 3	03/09	Practice of identifying the study question/Prof. Wei J. Chen																					
Week 4	03/16	Cross-Sectional Surveys: Rationale, Design, and Data Collection/Prof. Wei J. Chen																					
Week 5	03/23	Case-Control Studies: Rationale, Design, and Data Collection/Prof. Wei J. Chen																					
Week 6	03/30	Cohort Studies: Rationale, Design, and Data Collection/Prof. Kuo-Liong Chien																					
Week 7	04/06	Writing Exercise: Background, Objectives and Methods of the proposal/Prof. Wei J. Chen																					
Week 8	04/13	Evaluation of health service: Rationale, Design, and Data Collection/Asso. Prof. Ming-Chin Yang *(Class time: 13:00 to 15:30 )																					

Week 9	04/20	Experimental Studies: Rationale, Design, and Data Collection/Prof. Kuo-Liong Chien
Week 10	04/27	Miscellaneous Types of Studies: Ecological Studies, Case Series, Qualitative Studies, and Systematic Reviews/Prof. Wei J. Chen
Week 11	05/04	Students' Mid-Term Presentation
Week 12	05/11	Data Analysis: Data Management, Descriptive Analysis, and Comparative Statistics/Prof. Chuhsing Kate Hsiao
Week 13	05/18	Data Analysis: Advanced Statistics/Prof. Chuhsing Kate Hsiao
Week 14	05/25	Research Ethics/Prof. Wei J. Chen
Week 15	06/01	Completing a Full Proposal/Prof. Wei J. Chen
Week 16	06/08	Poster and Oral Presentations/Prof. Wei J. Chen
Week 17	06/15	Submitting and Publishing Results in Academic Journals/Prof. Wei J. Chen
Week 18	06/22	Students' Final Presentation