

課程資訊 Course Information					
課程名稱 Course title (中/英文)	中文名稱：全球環境衛生學 English: Global Environmental Health Science				
課程編號 Curriculum Number	MGH 7006 853M0060	班次 Class		學分數 Credits	2
全/半年 Full/Half Yr.	密集課程 1 周 Intensive course of 1 week			必/選修 Required/Elective	必修 Required
授課教師 Instructor	羅崇義 李婉甄			開課系所 Designated for	全球衛生碩士學位學程 MGH
上課時間 Time	2020/2/9 (日)-14(五) 0800-1730			上課地點 Venue	601A
備註 Remarks	本課程以英語授課；全球衛生碩士學位學程必修；總人數上限 20 人。				
課程大綱（中/英文） Course Syllabus					
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課程概述 Course Description	This course explores the fundamentals of environmental health, giving students a solid grounding in current issues and controversies and enhancing understanding of the scientific data that drives these issues. It includes readings that illustrate concepts in the context of a developed country, as well as readings that illustrate that same concept in a developing country. By examining environmental health from local to regional perspectives, the materials also educate students about a variety of environmental health topics including human population, toxicology/biomes, water resources, solid and hazardous waste management, environmental justice, communications, technology, regulatory policy, and the consequences of human activity on natural systems. Some of these issues are further addressed with hands-on experiences in field trips. Though this course, we aim to lay out the facts, make the connections, and demonstrate the importance of crucial environmental health issues to human health and well-being, both in our homes, workplaces, and neighborhoods, and on a global scale.				
課程目標 Course Objective	1. Learn how environmental issues affect health and well-being closer to home 2. Discover how different fields incorporate environmental health perspectives				

	3. Explore the cross-discipline manifestations of environmental health 4. Understand the global ramifications of population and climate change																		
課程要求 Course Requirement	The course sessions will include presentation on the topic of the day by the lecturer, and discussions of reading and other topics of interest. The materials of each lecture will be available on CEIBA for students to download.																		
關鍵字 Keywords																			
Office Hours																			
指定閱讀 Designated reading																			
參考書目 References	1. Howard Frumkin (2016). Environmental Health: From Global to Local, 3 <sup>rd</sup> edition. John Wiley & Sons. 2. Anne Marie Zimeri (2013). Introduction to environmental health : a global perspective. San Diego, CA : Cognella.																		
評量方式 Grading	<table border="1"> <thead> <tr> <th>#</th><th>項目</th><th>%</th><th>說明</th></tr> </thead> <tbody> <tr> <td>1</td><td>Participation</td><td>20</td><td>In-class participation and group discussion.</td></tr> <tr> <td>2</td><td>Homework</td><td>30</td><td>Including case study report, site visit reports, and so on.</td></tr> <tr> <td>3</td><td>Final group project</td><td>50</td><td>Presentations on selected topics.</td></tr> </tbody> </table>			#	項目	%	說明	1	Participation	20	In-class participation and group discussion.	2	Homework	30	Including case study report, site visit reports, and so on.	3	Final group project	50	Presentations on selected topics.
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週次 Week	日期 Date	單元主題（中/英文） Topic	CEPH 核心能力 (CEPH Core Competence)																
第 1 週 Week 1		<b>Part I: Methods and paradigms</b> Introduction to environmental health	D17-1, D17-7																
第 2 週 Week 2		Environmental and occupational health epidemiology	D17-1, D17-7																
第 3 週 Week 3		Exposure science, industrial hygiene and exposure assessment	D17-3, D17-7																
第 4 週 Week 4		Risk assessment in environmental health	D17-3, D17-7																
第 5 週 Week 5		Gene, genomics and environmental health	D17-7, D17-8																
第 6 週 Week 6		<b>Part II: Environmental health on the local scale</b> Buildings and health	D17-7																
第 7 週 Week 7		Pest control and pesticides	D17-7																

第 8 週 Week 8		Solid and hazardous waste	D17-7
第 9 週 Week9		Environmental disasters	D17-7
第 10 週 Week 10		Environmental disasters – Case study	D17-7
第 11 週 Week 11		Work and health: Factory visit	D17-7
第 12 週 Week 12		<b>Part III: Environmental health on the regional scale</b> Air pollution and health (I)	D17-7
第 13 週 Week 13		Air pollution and health (II) : Field trip to Bali Refuse Incineration Plant	D17-7
第 14 週 Week 14		Air pollution and health (III) : Field trip to Taichung Power Plant	D17-7
第 15 週 Week 15		Water and health (I)	D17-7
第 16 週 Week 16		Water and health (II): Field trip to the water treatment plant	D17-7
第 17 週 Week 17		<b>Part IV: Environmental health on the global scale</b> Climate change and human health	D17-7
第 18 週 Week 18		Group project presentation	6

全球衛生碩士學位學程 核心能力

#### Global Health Program Competencies

Code	Competencies
<b>D17-1</b>	Explain public health history, philosophy and values
<b>D17-2</b>	Identify the core functions of public health and the 10 Essential Services*
<b>D17-3</b>	Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
<b>D17-4</b>	List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
<b>D17-5</b>	Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
<b>D17-6</b>	Explain the critical importance of evidence in advancing public health knowledge
<b>D17-7</b>	Explain effects of environmental factors on a population's health
<b>D17-8</b>	Explain biological and genetic factors that affect a population's health
<b>D17-9</b>	Explain behavioral and psychological factors that affect a population's health
<b>D17-10</b>	Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
<b>D17-11</b>	Explain how globalization affects global burdens of disease

<b>D17-12</b>	Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)
<b>1</b>	Analyze the roles, relationships, and resources of the entities influencing global health
<b>2</b>	Apply ethical approaches in global health research and practice
<b>3</b>	Apply monitoring and evaluation techniques to global health programs, policies, and outcomes
<b>4</b>	Propose sustainable and evidence-based multi-sectoral interventions, considering the social determinants of health specific to the local area
<b>5</b>	Design sustainable workforce development strategies for resource-limited settings
<b>6</b>	Display critical self-reflection, cultural humility, and ongoing learning in global health

\* 授課內容引用本所（系）教師發表之著作\_\_\_\_\_篇，引用本院教師發表之著作\_\_\_\_\_篇。  
（請列出著作出版資料：作者姓名，題目，期刊名稱，卷數，起訖頁數及出版年）