

## 課程大綱

課程概述	This summer course will introduce the water resources and problems related to water resources management in Taiwan and potential solutions for sustainable water resources management.
課程目標	<ol style="list-style-type: none"> <li>1. To facilitate students with an overall understanding of the water resources system,</li> <li>2. To discuss issues of water resources management and possible solutions for sustainable development,</li> <li>3. To enhance academic collaboration between NTU and the Okayama University.</li> </ol>
課程要求	本課程以英語授課
參考書目	
評量方式	Participation in class discussions and final group presentation.
課程名稱 (中、英文)	永續水資源系統管理 Sustainable Water Resource System Management
授課教師	范致豪
學分	3
課程總時數	48
課程網頁	

## 課程進度

日期	時間	單元主題
107/8/10	6	Introduction to sustainable development (scarcity) Introduction to sustainable development (Food-Water-Energy Nexus)
107/08/11	6	Experiencing Taiwan's Tea Culture (Field excursion)
107/08/12	6	Field excursion - Wetland reservation and Mangrove reservation
107/8/13	6	Water resources system (Overall, demand, supply, and management)
107/8/14	6	Management tools – GIS and practices
107/8/15	6	Management tools – Remote Sensing Environmental system analysis
107/8/16	6	Water related disasters (droughts, floods, pollution) Risk management for natural disasters Workshop guidance and topics discussion for workshop presentation
107/8/17	6	Workshop summing up Group presentations, discussions and evaluation



## 2018 NTU-OU Summer Course

2018 NTU-OU Summer Course on Sustainable Water Resource System Management		
<b>Objectives:</b>		
<ol style="list-style-type: none"> <li>To facilitate students with an overall understanding of the water resources system,</li> <li>To discuss issues of water resources management and possible solutions for sustainable development,</li> <li>To enhance academic collaboration between NTU and the Okayama University.</li> </ol>		
<b>Venue:</b> Department of Bioenvironmental Systems Engineering, NTU		
<b>Workshop period:</b> 9 – 18, August, 2018		
Program Schedule		
8/09 (Thursday)		
Arrival at the Taiwan Taoyuan International Airport (17:40)		
Checking into the dormitory		
8/10 (Friday)		
09:00 – 10:00	Opening ceremony	Dean Prof. Hsu-Sheng Lur (盧虎生院長) Prof. Chihao Fan
10:00 – 12:00	Orientation	Prof. Chihao Fan
13:30 – 15:00	Introduction to sustainable development (scarcity)	Prof. Yu-Pin Lin
15:15 – 16:45	Introduction to sustainable development (Food-Water-Energy Nexus)	Prof. Yu-Pin Lin
18:00 20:00	Welcome reception	Prof. Chihao Fan
8/11 (Saturday)		
09:00 – 12:00	Experiencing Taiwan's Tea Culture (Pinglin Tea Museum) 臺灣茶文化體驗(坪林茶葉博物館)	Prof. Ming-Che Hu
14:00 – 17:00	Experiencing Taiwan's Tea Culture (Tea plantation in Maokong) 臺灣茶文化體驗(貓空茶園)	Prof. Ming-Che Hu
8/12 (Sunday)		
09:00 – 12:00	Field excursion - Wetland Reservation (Guandu Nature Park)	Prof. Rita Yam
14:00 – 17:00	Field excursion - Mangrove Reservation (Mangrove Ecocenter, Tamsui)	Prof. Rita Yam
8/13 (Monday)		
09:00 – 10:30	Water resources system (Overall)	Prof. Shao-Yiu Hsu
10:45 – 12:15	Water resources system (Demand)	Prof. Shao-Yiu Hsu
13:30 – 15:00	Water resources system (Supply)	Prof. Ming-Che Hu
15:15 – 16:45	Water resources system (Management)	Prof. Ming-Che Hu
8/14 (Tuesday)		
09:00 – 10:30	Management tools – GIS (1)	Prof. Hwa-Lung Yu
10:45 – 12:15	Management tools – GIS (2)	Prof. Hwa-Lung Yu
13:30 – 15:00	Management tools – GIS practice	Prof. Hwa-Lung Yu
15:15 – 16:45	Management tools – GIS practice	Prof. Hwa-Lung Yu
8/15 (Wednesday)		

09:00 – 10:30	Management tools – Remote Sensing (1)	Prof. Ke-Sheng Cheng
10:45 – 12:15	Management tools – Remote Sensing (2)	Prof. Ke-Sheng Cheng
13:30 – 15:00	Environmental system analysis	Prof. Ching-Pin Tung
15:15 – 16:45	Environmental system analysis	Prof. Ching-Pin Tung
<b>8/16 (Thursday)</b>		
09:00 – 10:30	Water related disasters (droughts, floods, pollution)	Prof. Ming-Daw Su
10:45 – 12:15	Risk management for natural disasters	Prof. Ming-Daw Su
13:30 – 15:00	Workshop guidance	Prof. Ming-Daw Su
15:15 – 16:45	Topics discussion for workshop presentation	Prof. Ming-Daw Su
<b>8/17 (Friday)</b>		
09:00 – 10:30	Workshop summing up	All lecturers
10:45 – 12:15	Workshop summing up	All lecturers
13:30 – 15:00	Presentations, discussions and evaluation	All students
15:15 – 16:45	Closing ceremony	Prof. Chihao Fan
18:00 – 20:00	Farewell dinner party	Prof. Chihao Fan
<b>8/18 (Saturday)</b>		
	Departure from Taipei	