

Tamkang University Academic Year 114, 1st Semester Course Syllabus

Course Title	SEMINAR	Instructor	LI, CHI-WANG
Course Class	TEWXM1A MASTER'S PROGRAM, DEPARTMENT OF WATER RESOURCES AND ENVIRONMENTAL ENGINEERING, 1A	Details	♦ General Course ♦ Required ♦ 1st Semester ♦ 1 Credits
Relevance to SDGs	SDG6 Clean water and sanitation SDG7 Affordable and clean energy		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
I . Cultivating students with capabilities of carrying out practical works or academic research related to water resources and environmental engineering. II. Cultivating students with capability of solving problems through researching, planning, and management. III. Cultivating students to become professional engineers with care in environment and professional ethics. IV. Preparing students with the capabilities of engaging in international engineering business, to adapt to globalization and social needs, and to expand their global perspectives.			
Subject Departmental core competences			
A. Mathematical and engineering knowledge needed for water resources and environmental engineering applications.(ratio:30.00) B. Capabilities of planning and conducting experiments, analyzing and explaining experimental data, applying information tool, and collecting and compiling data. (ratio:15.00) C. Logical thinking, analysis, integration, problem-solving skills, engineering planning, design and implementation ability.(ratio:20.00) D. Skill of using professional foreign language and global perspective.(ratio:5.00) E. Capabilities of writing and presenting research report.(ratio:25.00) F. Awareness of the importance of teamwork, working attitude and professional ethics, and to learn continuously.(ratio:5.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:20.00) 3. A vision for the future. (ratio:10.00)			

4. Moral integrity. (ratio:5.00)				
5. Independent thinking. (ratio:25.00)				
6. A cheerful attitude and healthy lifestyle. (ratio:5.00)				
7. A spirit of teamwork and dedication. (ratio:20.00)				
8. A sense of aesthetic appreciation. (ratio:5.00)				
Course Introduction		The seminar aims to provide participants with comprehensive knowledge of policies, engineering practices, and current research pertaining to water resources and Environmental engineering.		
<p>The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.</p> <p>Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.</p> <p>I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.</p> <p>II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.</p> <p>III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.</p>				
No.	Teaching Objectives			objective methods
1	To gain acknowledge of the policies, engineering and researches related to water resources and environmental engineering. To explore future related development.			Cognitive
The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment				
No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEF	12345678	Lecture	Report(including oral and written)
Course Schedule				
Week	Date	Course Contents		Note
1	114/09/15 ~ 114/09/21	Introduction to the Course		

2	114/09/22 ~ 114/09/28	Guest Speaker Presentation (Topic to be announced)	
3	114/09/29 ~ 114/10/05	Weekly Topic Discussion	
4	114/10/06 ~ 114/10/12	Weekly Topic Discussion	
5	114/10/13 ~ 114/10/19	Guest Speaker Presentation (Topic to be announced)	
6	114/10/20 ~ 114/10/26	Weekly Topic Discussion	
7	114/10/27 ~ 114/11/02	Weekly Topic Discussion	
8	114/11/03 ~ 114/11/09	Guest Speaker Presentation (Topic to be announced)	
9	114/11/10 ~ 114/11/16	Weekly Topic Discussion	
10	114/11/17 ~ 114/11/23	Midterm Assessment	
11	114/11/24 ~ 114/11/30	Guest Speaker Presentation (Topic to be announced)	
12	114/12/01 ~ 114/12/07	Weekly Topic Discussion	
13	114/12/08 ~ 114/12/14	Weekly Topic Discussion	
14	114/12/15 ~ 114/12/21	Guest Speaker Presentation (Topic to be announced)	
15	114/12/22 ~ 114/12/28	Weekly Topic Discussion	
16	114/12/29 ~ 115/01/04	Comprehensive Final Exam	
17	115/01/05 ~ 115/01/11	Course Summary & Individual Consultations	
18	115/01/12 ~ 115/01/18	Individual Consultations	
Key capabilities		self-directed learning Interdisciplinary	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)	
Distinctive teaching			

Course Content	Logical Thinking Environmental Safety Green Energy
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Presentations Using teaching materials from other writers:Presentations
References	
Grading Policy	<p>◆ Attendance : % ◆ Mark of Usual : 50.0 % ◆ Midterm Exam : %</p> <p>◆ Final Exam : %</p> <p>◆ Other 〈報告〉 : 50.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php.</p> <p>※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>