

## Tamkang University Academic Year 109, 2nd Semester Course Syllabus

Course Title	WASTE LANDFILLING	Instructor	GAU SUE-HUAI
Course Class	TEWXD1A DOCTORAL PROGRAM, DEPARTMENT OF WATER RESOURCES AND ENVIRONMENTAL ENGINEERING, 1A	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG11 Sustainable cities and communities		
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			
C. Logical thinking, analysis, integration, problem-solving skills, engineering planning, design and implementation ability.(ratio:40.00) D. Skill of using professional foreign language and global perspective.(ratio:30.00) E. Capabilities of writing and presenting research report.(ratio:30.00)			
Subject Schoolwide essential virtues			
4. Moral integrity. (ratio:50.00)  6. A cheerful attitude and healthy lifestyle. (ratio:50.00)			

Course Introduction	Discussing the theory of landfilling, studying the planning, design, operation, closure, and management of landfill.
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**The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.**

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Build up the understanding of the theories of landfilling.	Psychomotor
2	Build up the abilities of planning and design, of landfilling.	Affective
3	Build up the abilities of management of landfilling.	Psychomotor
4	Build up the abilities of management of secured landfilling.	Psychomotor

**The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment**

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	D	4	Lecture, Discussion	Testing, Report(including oral and written), Activity Participation
2	C	4	Lecture, Discussion	Testing, Report(including oral and written), Activity Participation
3	E	4	Lecture, Discussion	Testing, Report(including oral and written), Activity Participation
4	C	6	Lecture, Discussion	Testing, Report(including oral and written), Activity Participation

Course Schedule			
Week	Date	Course Contents	Note
1	110/02/22 ~ 110/02/28	Introduction	
2	110/03/01 ~ 110/03/07	Landfilling State of the Art	
3	110/03/08 ~ 110/03/14	Landfill Theory	
4	110/03/15 ~ 110/03/21	Landfill Theory	
5	110/03/22 ~ 110/03/28	Landfill Planning & Design	
6	110/03/29 ~ 110/04/04	Teaching administration observation period	No classes
7	110/04/05 ~ 110/04/11	Landfill Operation & Management	
8	110/04/12 ~ 110/04/18	Landfill Operation & Management	
9	110/04/19 ~ 110/04/25	Leachate Treatment	
10	110/04/26 ~ 110/05/02	Midterm Exam Week	
11	110/05/03 ~ 110/05/09	Gas Production & Reuse	
12	110/05/10 ~ 110/05/16	Site Restoration	
13	110/05/17 ~ 110/05/23	Ashes Landfill	
14	110/05/24 ~ 110/05/30	Ocean Landfill	
15	110/05/31 ~ 110/06/06	Secured Landfill	
16	110/06/07 ~ 110/06/13	Secured Landfill	
17	110/06/14 ~ 110/06/20	Leachate Treatment of Ashes Landfill	
18	110/06/21 ~ 110/06/27	Final Exam Week	
Requirement			
Teaching Facility		Computer	
Textbooks and Teaching Materials		Tchobanoglous, Theisen, Vigil, "Integrated Solid Waste Management" , McGraw-Hill, 1993.	
References		Tchobanoglous, Theisen, Vigil, "Integrated Solid Waste Management" , McGraw-Hill, 1993.	

Number of Assignment(s)	(Filled in by assignment instructor only)
Grading Policy	<p>◆ Attendance :                %    ◆ Mark of Usual : 50.0 %    ◆ Midterm Exam : 25.0 %</p> <p>◆ Final Exam :    25.0 %</p> <p>◆ Other (    ) :                %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a>.</p> <p><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>