

Tamkang University Academic Year 105, 2nd Semester Course Syllabus

Course Title	SUSTAINABLE TRANSPORTATION	Instructor	HSIN-PING HSU
Course Class	TLTXB2P DEPARTMENT OF TRANSPORTATION MANAGEMENT, 2P	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 2 Credits
Departmental Aim of Education			
<ul style="list-style-type: none"> I. To obtain professional transportation knowledge. II. To familiarize with execution of transportation practices. III. To master oral expression and teamwork. IV. To capture basic skills of system analysis. V. To emphasize professional transportation ethics. 			
Departmental core competences			
<ul style="list-style-type: none"> A. To obtain basic knowledge of transportation management. B. To familiarize with practice-oriented professional skills. C. To be capable of oral expression and teamwork. D. To obtain basic ability of system analysis. E. To build transportation ethics, care for humanity, and global visions. 			
Course Introduction	<p>The purpose of the course is to familiarize students with the basic concepts of sustainable development, the key issues in sustainable transportation (the balance among environmental protection, social equity, and economic prosperity), various strategies for promoting sustainable transportation worldwide, and current status and future challenges of sustainable transportation in Taiwan. Students will acquire relevant knowledge through lectures, examinations, discussions, and assignments.</p>		

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I. Objective Levels (select applicable ones) :

- (i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying,
C4-Analyzing, C5-Evaluating, C6-Creating
- (ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation,
P4-Linked Operation, P5-Automation, P6-Origination
- (iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing,
A4-Organizing, A5-Characterizing, A6-Implementing

II. The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3, C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A, AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	To familiarize students with the basic concepts, key issues, various strategies, and future challenges of sustainable transportation.	C5	ABCDE

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	To familiarize students with the basic concepts, key issues, various strategies, and future challenges of sustainable transportation.	Lecture, Discussion	Written test, Report, Participation

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◆ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◆ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◇ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	106/02/13 ~ 106/02/19	Course Introduction	
2	106/02/20 ~ 106/02/26	Basic Concepts of Sustainable Development	
3	106/02/27 ~ 106/03/05	Key Issues in Sustainable Transportation	
4	106/03/06 ~ 106/03/12	Sustainable Transportation and Environmental Protection I	
5	106/03/13 ~ 106/03/19	Sustainable Transportation and Environmental Protection II	
6	106/03/20 ~ 106/03/26	Sustainable Transportation and Economic Prosperity I	
7	106/03/27 ~ 106/04/02	Sustainable Transportation and Economic Prosperity II	
8	106/04/03 ~ 106/04/09	Spring Break	
9	106/04/10 ~ 106/04/16	Sustainable Transportation and Social Equity	
10	106/04/17 ~ 106/04/23	Midterm Exam Week	
11	106/04/24 ~ 106/04/30	Solutions: Transportation Planning I	
12	106/05/01 ~ 106/05/07	Solutions: Transportation Planning II	

13	106/05/08 ~ 106/05/14	Solutions: Land Use Planning I	
14	106/05/15 ~ 106/05/21	Solutions: Land Use Planning II	
15	106/05/22 ~ 106/05/28	Solutions: New Energy Technology	
16	106/05/29 ~ 106/06/04	Solutions: Social Policy	Assignment Due June 1
17	106/06/05 ~ 106/06/11	In-Class Final Examination (on June 8)	
18	106/06/12 ~ 106/06/18	Final Exam Week	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	Lecture slides, course handouts, and assigned readings.		
Reference(s)	1) Black, W. R. (2010). Sustainable transportation: problems and solutions. Guilford Press. 2) Tumlin, J. (2011). Sustainable transportation planning: Tools for creating vibrant, healthy, and resilient communities (Vol. 16). John Wiley & Sons.		
Number of Assignment(s)	1 (Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 35.0 % ◆ Final Exam : 35.0 % ◆ Other () : %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.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 . ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.		