

Tamkang University Academic Year 106, 2nd Semester Course Syllabus

Course Title	INTRODUCTION TO SMART MOBILITY AND SUSTAINABLE DEVELOPMENT	Instructor	CHIH-LIN CHUNG
Course Class	TGLXB0A ELECTIVES COURSES BY COLLEGE OF BUSINESS AND MANAGEMENT, 0A	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 2 Credits
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			
<ul style="list-style-type: none"> I . Acquisition of professional knowledge. II . Learning effective self-planning. III . Theoretical application of practical matters. IV . Interpersonal communication and teamwork. V . Analysis of problems and recommendations. VI . Awareness of Ethics as a global citizen. 			
D e p a r t m e n t a l c o r e c o m p e t e n c e s			
<ul style="list-style-type: none"> A. Basic Business and Management Knowledge. B. Language Proficiency in Chinese or English. C. Independent thinking. D. Logic Reasoning. 			
Course Introduction	<p>This course offers a fundamental understanding of the latest development of smart mobility and sustainable development. It will involve transportation English reading, listening, writing, and speaking. Students will explore different eco-friendly transportation modes.</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	Case studies of sustainable development	C2	A
2	Important topics and applications of smart mobility.	C3	B

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Case studies of sustainable development	Lecture, Appreciation, Visit	Written test, Participation
2	Important topics and applications of smart mobility.	Lecture, Discussion	Written test, Report

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	107/02/26 ~ 107/03/04	Introduction	
2	107/03/05 ~ 107/03/11	Smart City	
3	107/03/12 ~ 107/03/18	Smart City and ITS	
4	107/03/19 ~ 107/03/25	ITS Applications	
5	107/03/26 ~ 107/04/01	Field Trip (Smart City Summit and Expo)	
6	107/04/02 ~ 107/04/08	Spring Break	
7	107/04/09 ~ 107/04/15	Case Study: Eco Highway and Traffic Calming Measures	
8	107/04/16 ~ 107/04/22	Case Study: Mass Rapid Transit	
9	107/04/23 ~ 107/04/29	Case Study: Public Bike System	
10	107/04/30 ~ 107/05/06	Midterm Exam Week	
11	107/05/07 ~ 107/05/13	Field Trip (Smart City Summit and Expo)	Will be moved to week 5 to have more time for the week-long expo.
12	107/05/14 ~ 107/05/20	In-class Midterm Evaluation	PPT assignment due

13	107/05/21 ~ 107/05/27	Presentation	
14	107/05/28 ~ 107/06/03	Case Study: Clean Energy for Transportation	
15	107/06/04 ~ 107/06/10	Logistics Services	
16	107/06/11 ~ 107/06/17	Presentation	
17	107/06/18 ~ 107/06/24	In-class Final Evaluation	
18	107/06/25 ~ 107/07/01	Final Exam Week	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	US DOT ITS ePrimer (http://www.pcb.its.dot.gov/eprimer.aspx); Wikipedia; Formosa English News; Professional English for Students of Logistics by Y. Stukalina, 2014		
Reference(s)	FHWA, US DOT research data exchange: https://www.its-rde.net/		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	<p>◆ Attendance : 10.0 % ◆ Mark of Usual : 25.0 % ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : 30.0 %</p> <p>◆ Other <PPT Presentation> : 5.0 %</p>		
Note	<p>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.</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>		