

Tamkang University Academic Year 107, 2nd Semester Course Syllabus

Course Title	COMMERCIAL VEHICLE OPERATION	Instructor	CHIH-LIN CHUNG
Course Class	TLTXB3P DEPARTMENT OF TRANSPORTATION MANAGEMENT, 3P	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 3 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>This course offers a fundamental understanding of the latest development of intelligent transportation systems (ITS) and commercial vehicle operation (CVO). Five modules will be covered, including 1. Introduction to ITS, 2. Transportation Management Systems, 3. Freight, Intermodal, and CVO, 4. Connected Vehicles, and 5. Emerging Issues. This course will involve some ITS English terminology and reading.</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-Charaterizing, 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	Applications and case studies of the commercial vehicle operation	C5	A
2	Operational analysis and topic assessment of each specific commercial vehicle	C6	C

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Applications and case studies of the commercial vehicle operation	Lecture, Appreciation, Visit	Written test, Participation
2	Operational analysis and topic assessment of each specific commercial vehicle	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	108/02/18 ~ 108/02/24	Introduction	
2	108/02/25 ~ 108/03/03	Smart City	
3	108/03/04 ~ 108/03/10	Smart City and ITS	
4	108/03/11 ~ 108/03/17	ITS and Transportation Management Systems	M3 of the ePrimer
5	108/03/18 ~ 108/03/24	ITS and Transportation Management Systems	
6	108/03/25 ~ 108/03/31	Field Trip (Smart City Expo)	
7	108/04/01 ~ 108/04/07	Spring Break	
8	108/04/08 ~ 108/04/14	Freight, Intermodal, and CVO	M6 of the ePrimer
9	108/04/15 ~ 108/04/21	In-class Midterm Evaluation	
10	108/04/22 ~ 108/04/28	Midterm Exam Week	
11	108/04/29 ~ 108/05/05	Freight, Intermodal, and CVO	
12	108/05/06 ~ 108/05/12	Radio Frequency Identification (RFID)	

13	108/05/13 ~ 108/05/19	Radio Frequency Identification (RFID)	
14	108/05/20 ~ 108/05/26	Field Trip (Gogoro or Carplus)	
15	108/05/27 ~ 108/06/02	Connected Vehicles and Emerging Issues	M13/14 of the ePrimer
16	108/06/03 ~ 108/06/09	Connected Vehicles and Emerging Issues	
17	108/06/10 ~ 108/06/16	In-class Final Evaluation	
18	108/06/17 ~ 108/06/23	Final Exam Week	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	US DOT ITS ePrimer (http://www.pcb.its.dot.gov/eprimer.aspx) ; Wikipedia		
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 : 15.0 % ◆ Mark of Usual : 40.0 % ◆ Midterm Exam : 20.0 %</p> <p>◆ Final Exam : 20.0 %</p> <p>◆ Other <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>		