Tamkang University Academic Year 104, 2nd Semester Course Syllabus

Course Title	COMMERCIAL VEHICLE OPERATION	Instructor	CHIH-LIN CHUNG
Course Class	TLTXB3P DEPARTMENT OF TRANSPORTATION MANAGEMENT, 3P	Details	◆ Selective ◆ One Semester ◆ 3 Credits

Departmental Aim of Education

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

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	This course offers a fundamental understanding of 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.

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	CVO management structure formulation	C4	A
2	Applications and case studies of the commercial vehicle operation	C5	A
3	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	CVO management structure formulation	Lecture, Discussion, Appreciation	Written test, Participation
2	Applications and case studies of the commercial vehicle operation	Lecture, Discussion, Appreciation	Written test
3	Operational analysis and topic assessment of each specific commercial vehicle	Lecture, Discussion, Appreciation	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	105/02/15 ~ 105/02/21	Introduction	
2	105/02/22 ~ 105/02/28	Smart City and ITS	
3	105/02/29 ~ 105/03/06	ITS and Transportation Management Systems	M3 of the ePrimer
4	105/03/07 ~ 105/03/13	Transportation Management Systems	
5	105/03/14 ~ 105/03/20	Freight, Intermodal, and CVO	M6 of the ePrimer
6	105/03/21 ~ 105/03/27	Field Trip: Smart City Exhibition	
7	105/03/28 ~ 105/04/03	Freight, Intermodal, and CVO	
8	105/04/04 ~ 105/04/10	Spring Break	
9	105/04/11 ~ 105/04/17	Fleet Management	
10	105/04/18 ~ 105/04/24	Midterm Exam Week	
11	105/04/25 ~ 105/05/01	Case Study or Field Trip	
12	105/05/02 ~ 105/05/08	Telematics and Connected Vehicles	M13 of the ePrimer

13	105/05/09～ 105/05/15	Telematics and Connected Vehicles	
14	105/05/16～ 105/05/22	Emerging Issues	M14 of the ePrimer
15	105/05/23～ 105/05/29	Field Trip (Tentative)	
16	105/05/30～ 105/06/05	Case Study	
17	105/06/06～ 105/06/12	Presentation and Sharing	
18	105/06/13～ 105/06/19	Final Exam Week	

Requirement	1. This course is involved with some ITS terminology and readings. If you're interested in ITS and English, this is the course for you. 2. We will have two off-campus visits. 3. This class does not have a midterm or final exam.
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)	5 (Filled in by assignment instructor only)
Grading Policy	◆ Attendance： 10.0 % ◆ Mark of Usual：80.0 % ◆ Midterm Exam： % ◆ Final Exam： % ◆ Other〈Participation〉：10.0 %
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.**