

Tamkang University Academic Year 113, 2nd Semester Course Syllabus

Course Title	COMMERCIAL VEHICLE OPERATION	Instructor	CHIH-KANG LIN
Course Class	TLTXB2P DEPARTMENT OF TRANSPORTATION MANAGEMENT, 2P	Details	◆ General Course ◆ Selective ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure		
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 . 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.			
Subject Departmental core competences			
A. To obtain basic knowledge of transportation management.(ratio:40.00) B. To familiarize with practice-oriented professional skills.(ratio:10.00) C. To be capable of oral expression and teamwork.(ratio:30.00) D. To obtain basic ability of system analysis.(ratio:10.00) E. To build transportation ethics, care for humanity, and global visions.(ratio:10.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:15.00) 2. Information literacy. (ratio:20.00) 3. A vision for the future. (ratio:10.00) 4. Moral integrity. (ratio:5.00) 5. Independent thinking. (ratio:25.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:15.00) 8. A sense of aesthetic appreciation. (ratio:5.00)			

Course Introduction	In recent years, the e-commerce market has rapidly grown, leading to the rise of various business models. This growth has highlighted the need for better operational management of commercial fleets. To tackle this issue, the course will explore several key topics, including the current landscape of the e-commerce market, real-time monitoring systems for commercial fleets, AI-driven dispatching and scheduling for delivery vehicles, and strategies for managing delivery performance. The course will also include case studies to help students gain a deeper understanding of these processes.			
<p>The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.</p> <p>Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.</p> <p>I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.</p> <p>II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.</p> <p>III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.</p>				
No.	Teaching Objectives			objective methods
1	Applications and case studies of the commercial vehicle operation			Cognitive
2	Operational analysis and topic assessment of each specific commercial vehicle			Cognitive
The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment				
No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	1234567	Lecture, Discussion	Testing, Discussion(including classroom and online), Report(including oral and written)
2	ABCDE	12345678	Lecture, Discussion	Testing, Discussion(including classroom and online), Report(including oral and written)
Course Schedule				
Week	Date	Course Contents		Note
1	114/02/17 ~ 114/02/23	Introduction to Commercial Vehicle Operation		

2	114/02/24 ~ 114/03/02	Introduction to the Regulatory System of Tourism Bus Carrier	
3	114/03/03 ~ 114/03/09	Operational Management of Tourism Bus Operators	
4	114/03/10 ~ 114/03/16	Introduction to the Regulatory System of Taxi Carrier	
5	114/03/17 ~ 114/03/23	Operational Management of Taxi Operators	
6	114/03/24 ~ 114/03/30	Introduction to the Regulatory System of Trucking Carrier	
7	114/03/31 ~ 114/04/06	Introduction to the Regulatory System of Fixed-Route Trucking Carrier and Container Trucking Carrier	
8	114/04/07 ~ 114/04/13	Operational Management of Trucking Carrier, Fixed-Route Trucking Carrier and Container Trucking Carrier	
9	114/04/14 ~ 114/04/20	Midterm Exam/Midterm Assessment Week (teachers can adjust the week as needed)	
10	114/04/21 ~ 114/04/27	Introduction to the Operational Characteristics of Commercial Vehicle Operation	
11	114/04/28 ~ 114/05/04	Fleet Management System for Commercial Vehicle Operations	
12	114/05/05 ~ 114/05/11	Introduction to Traveler Salesman Problem	
13	114/05/12 ~ 114/05/18	Introduction to Vehicle Routing Problem	
14	114/05/19 ~ 114/05/25	Introduction to Cluster Analysis for Order management	
15	114/05/26 ~ 114/06/01	Introduction to Meta-Heuristic Algorithms	
16	114/06/02 ~ 114/06/08	Final Project	
17	114/06/09 ~ 114/06/15	Final Exam/Final Assessment Week (teachers can adjust the week as needed)	
18	114/06/16 ~ 114/06/22	Flexible Teaching Week: Generally, no in-person classes; teachers may arrange teaching activities or final assessments, among other options.	
Key capabilities		self-directed learning Information Technology Problem solving Interdisciplinary	

Interdisciplinary	
Distinctive teaching	
Course Content	Logical Thinking
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Textbooks Using teaching materials from other writers:Presentations
References	FHWA, US DOT research data exchange: https://www.its-rde.net/ Su,J. M., et al. 2007.The Intelligent CVO Resource Management System. Institute of Transportation, Ministry of Transportation and Communications. Cho, W. S. 2017. A study on regulatory policy and consumer protection of new taxi business model. Institute of Transportation, Ministry of Transportation and Communications.
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 30.0 % ◆ Other 〈presentation〉 : 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.