

Tamkang University Academic Year 113, 2nd Semester Course Syllabus

Course Title	TRANSPORTATION ECONOMICS AND POLICY	Instructor	CHIEH-YU HSIAO
Course Class	TLTXM1A MASTER'S PROGRAM, DEPARTMENT OF TRANSPORTATION MANAGEMENT, 1A	Details	◆ General Course ◆ Selective ◆ One Semester ◆ 2 Credits
Relevance to SDGs	SDG3 Good health and well-being for people SDG8 Decent work and economic growth SDG9 Industry, Innovation, and Infrastructure SDG11 Sustainable cities and communities		
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 understand basic transportation theories. II. To familiarize with practical procedures of solving problems. III. To enhance language expression and interpersonal communication. IV. To expand ability of system analysis and interdisciplinary integration. V . To develop transportation ethics and humanistic quality.			
Subject Departmental core competences			
A. To obtain basic ability of research on transportation theories.(ratio:20.00) B. To obtain ability to practically solve problems.(ratio:30.00) C. To obtain ability of language expression and interpersonal communication.(ratio:10.00) D. To obtain ability of transportation system analysis and interdisciplinary integration. (ratio:30.00) E. To develop transportation ethics, humanistic quality, and innovative thinking.(ratio:10.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:25.00) 3. A vision for the future. (ratio:20.00) 4. Moral integrity. (ratio:5.00) 5. Independent thinking. (ratio:20.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:10.00)			

8. A sense of aesthetic appreciation. (ratio:5.00)

Course
Introduction

Based on undergraduate course "Transportation Economics," this course further investigate the theories and issues on transportation economics and policy. Students are expected to be familiar with the models and tools used in this field, and to be able to better analyze transportation problems after taking the course.

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

- I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.
- II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.
- III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	To learn Models and Tools in the field of Transportation Economics.	Cognitive
2	To learn how to analyze transportation problems.	Affective
3	To learn how to review the literature on transportation economics and policy.	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABD	1235	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
2	ABCDE	15678	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)

3	ACD	12457	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written)
Course Schedule				
Week	Date	Course Contents		Note
1	114/02/17 ~ 114/02/23	Introduction: Introduction to the course		
2	114/02/24 ~ 114/03/02	Demand: Transportation demand theory		
3	114/03/03 ~ 114/03/09	Demand: Transportation demand models		
4	114/03/10 ~ 114/03/16	Demand: Transportation demand models		
5	114/03/17 ~ 114/03/23	Demand: Transportation demand models--applications		
6	114/03/24 ~ 114/03/30	Costs: The nature of cost functions		
7	114/03/31 ~ 114/04/06	Costs: Cost functions for different modes		
8	114/04/07 ~ 114/04/13	Costs: Cost functions for different modes		
9	114/04/14 ~ 114/04/20	Pricing: Pricing theories		
10	114/04/21 ~ 114/04/27	Pricing: Congestion pricing		
11	114/04/28 ~ 114/05/04	Project Evaluation: Cost-benefit analysis		
12	114/05/05 ~ 114/05/11	Project Evaluation: Capacity choice for highways		
13	114/05/12 ~ 114/05/18	Regulation in Transportation: Introduction to economic regulation		
14	114/05/19 ~ 114/05/25	Regulation in Transportation: regulatory issues in transportation		
15	114/05/26 ~ 114/06/01	Industrial Organization of Transportation Providers: Private roads and transit services		
16	114/06/02 ~ 114/06/08	Term Project: Presentation and discussion		
17	114/06/09 ~ 114/06/15	Term Project: Presentation and discussion		
18	114/06/16 ~ 114/06/22	Term Project: Presentation and discussion		
Key capabilities		Problem solving Interdisciplinary		

Interdisciplinary	
Distinctive teaching	Project implementation course
Course Content	Logical Thinking
Requirement	Bases on the textbooks and latest journal papers, lecture notes will be posted on the course website. Students should read the class materials before the class, and are encouraged to discuss the materials in the class.
Textbooks and Teaching Materials	Self-made teaching materials:Handouts Using teaching materials from other writers:Textbooks
References	1. Tye, W.B., J.A. Gomez-Ibanez, and C. Winston (Editors), 1999. Essays in Transportation Economics and Policy: A Handbook in Honor of John R. Meyer. Brookings Institution Press. 2. Viscusi,W., J. Vernon, and J. Harrington, Jr, 2005. Economics of Regulation and Antitrust, 4th edition. The MIT Press. 3. Button, K., 2010. Transport Economics, 3rd edition. Edward Elgar Publishing. 4. McCarthy, P., 2001. Transportation Economics: Theory and Practice: A Case Study Approach. Blackwell Publishers. 5. Kanafani, A., 1983. Transportation Demand Analysis. McGraw-Hill Book Company. 6. Selected journal papers and reports.
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 45.0 % ◆ Midterm Exam : % ◆ Final Exam : % ◆ Other 〈 期末報告 〉 : 45.0 %
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.