

Travel Demand Forecasting

Course Name	Course type (credit/hours)	전필 (3/3)			Course code	E034
	Target students Division/major/grade	환경건설교통공학부/3학년			Openning semester	2017 1ST SEMESTER
	Class time and classroom	화B(팔211) 목A(팔211)(팔211)			English Grade	A(100%English)
Reference to this course	Prerequisite courses	교통체계분석 및 계획				
	Related basic courses					
	Recommanded concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)		최기주 (교수/공과대학 교통시스템공학과)			
	Office Room Number	팔달관 515호	Office phone Number	2538	e-mail	
	Office hours			Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number	팔달관 413호	Office phone Number	2541	e-mail	

1. Introduction

2. Course Objectives

- understand the nature of TDF
- understand the models at each step
- perform TDF process with actual data

3. Class types and activities

4. Teaching Method

<input checked="" type="checkbox"/> lecture	<input checked="" type="checkbox"/> discussion and debate
<input type="checkbox"/> team project(presentation and case studies)	<input type="checkbox"/> experiments(role-playing,etc)
<input type="checkbox"/> designing and production	<input type="checkbox"/> on-site learning(on-site training)
<input type="checkbox"/> others	

5. Support Systems in Use

<input checked="" type="checkbox"/> e-class	<input type="checkbox"/> automatic recording system	<input checked="" type="checkbox"/> web-based assignment
<input type="checkbox"/> cyber lecture	<input type="checkbox"/> blended learning(combination of online and offline teaching)	
<input type="checkbox"/> class behavior analyzing system	<input type="checkbox"/> others	

6. Teaching Tools

<input checked="" type="checkbox"/> PBL(Problem Based Learning)	<input type="checkbox"/> CBL(Case Based Learning)
<input type="checkbox"/> TBL(Team Based Learning)	<input type="checkbox"/> others

7. Knowledge and ability required for taking this course

Some transportation system analysis and planning knowledge would be required together with computer application capabilities.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10	
midterm exam	1회	35	
final exam	1회	35	
quiz	2회	10	
presentation			
discussion			
homework	4회	10	
etc			
study hours	4		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Sub	NCHRP Report 365_Travel Estimation Techniques for Urban Planning	William A. Martin and NancyA. McGuckin	TRB, National Academ	1998
Main	Transportation Engineering and Planning (3rd Edition)	C.S. Papacostas and P.D. Prevedouros	Prentice Hall	2003
Sub	교통 수요 분석: 이론과 모형	윤대식	박영사	2001

10. Class system and Class shedule

--

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	lang uage	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction The Concept of Travel Demand Forecast Transportation Economics		최기주			

< Class Schedule >

* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
2	Trip Generation(Growth Factor, Cross-classification)		최기주			
3	Trip Generation(Regression Model)		최기주			
4	Trip Distribution and GF		최기주			
5	Fratar Model, Gravity Model 1		최기주			
6	Gravity Model 2		최기주			
7	Modal Split Preliminaries		최기주			
8	Midterm Exam		최기주			
9	Modal Split(Logit Model 1)		최기주			
10	Modal Split(Logit Model 2)		최기주			
11	Traffic Assignment 1		최기주			
12	Traffic Assignment 2		최기주			
13	Traffic Assignment 3		최기주			
14	Criticism about 4 step process		최기주			
15	Review		최기주			
16	Final Exam		최기주			

11. Other items of notification