Republic of Iraq

Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Apparatus

College: Shatt Al-Arab University College
Department: Civil Engineering
Stage: 3rd stage
Lecturer name: Dr. Wisam Abdulla Najim
Academic title: Lecturer

Course Weekly Outline

Name	Dr. Wisam Abdulla Najim AlHalfi			
E-mail address	Engwisam7@gmail.com			
Course name	Transportation Engineering (CE317)			
Course objective	This course aims to introduce the basic concepts of transportation planning as an introduction to the study of the process of forecasting demand for travel and public transportation.			
Course description	A. Cognitive and educational objectives 1. Apply the basic elements of transportation planning. 2. Apply the sequential steps of the travel demand forecasting process (four-step process). 3. Introduction to public transportation. B. Course specific skill objectives 1. Ability to identify and analyze engineering problems. 2. Apply quantitative and numerical methods for the purpose of solving transportation engineering problems. 3. Ability to design, collect, analyze and interpret data and information.			
References	Traffic & Highway Engineering (4th Edition, SI) Nicholas J. Garber and Lester A. Hoel Cengage Learning, Stamford, USA, 2010.			
External sources	1. Highway and Traffic Engineering in Developing Countries by Bent Thagesen. 2. Traffic and Highway Engineering by Nicholas J. Garber and Lester A. Hoel.			
Course assessment	**Rebot**	**Quizzes and assessment**	**Mid-term exam**	**Final exam**
	5	**10**	**25**	**60**
General notes				

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Week No.	Theoretical	Experimental	Aims
1	Introduction to Transportation Engineering	Introduction and Background	This course aims to introduce the basic concepts of transportation planning as an introduction to the study of the process of forecasting demand for travel and public transportation.
2	Introduction to Transportation Engineering	History of transportation engineering	
3	Introduction to Transportation Engineering	Modes of Transportation & mode selection	
4	Transportation Planning Urban	transportation Planning	
5	Basic Elements of Transportation Planning	Transportation Planning	
6	Travel Demand Forecasting	Travel Demand Forecasting process	
7	Travel Demand Forecasting	Data Collection	
8	Travel Demand Forecasting	Trip Generation	
9	Travel Demand Forecasting	Trip Generation	
10	Travel Demand Forecasting	Trip Distribution	
11	Travel Demand Forecasting	Modal Split	
12	Travel Demand Forecasting	Traffic Assignment	
13	Public Transportation	Bus and Rail Operations	
14	Public Transportation	Capacity of Bus Stop	
15	Public Transportation	Constructing Route Schedule	