

**Faculty of Engineering & Technology**  
**Transport Planning and traffic Engineering**

**Information :**

**Course Code :** SCM 527      **Level :** Undergraduate      **Course Hours :** 3.00- Hours

**Department :** Department of Structural Engineering & Construction Management

**Instructor Information :**

Title	Name	Office hours
Professor	Mona Hussein Mohamed Abdallah	11
Professor	Mona Hussein Mohamed Abdallah	11
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	5
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	5

**Area Of Study :**

Upon successful completion of this course, the student should be able to:

- Understand the basic concepts and main principles
- Calculate the values of the essential terms
- Apply Codes provisions

Regarding components of traffic system traffic flow characteristics transportation planning prediction of trip generation & distribution prediction of modal split & traffic assignment

**Description :**

Transport planning: introduction to transport sciences, Definitions, Time horizons of transport planning, Elements of urban transport planning procedures, Data base, Introduction to travel demand forecasting models, Introduction to traffic management and public transport improvements, Introduction to evaluation of strategic transport plans and traffic management schemes, Traffic engineering: vehicle, user and road characteristics, Studies of traffic stream characteristic (speed, volume, trip time & delay), Fundamentals of traffic flow: speed, volume and density relationships,, Highway capacities, Traffic control devices.

**Course outcomes :**

**a.Knowledge and Understanding: :**

1 -	Describe the main concept of components of traffic system
2 -	Define the main terms of traffic flow characteristics
3 -	Describe the main concept of transportation planning

**b.Intellectual Skills: :**

1 -	Design the elements of components of traffic system
2 -	Assess issues of traffic flow characteristics
3 -	Assess issues of transportation planning
4 -	Solve problems regarding prediction of trip generation & distribution
5 -	Solve problems regarding prediction of modal split & traffic assignment

**c. Professional and Practical Skills: :**

1 - Prepare technical reports for transportation planning

**d. General and Transferable Skills: :**

1 - Work under stress

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
components of traffic system	8	6	2
traffic flow characteristics	8	6	2
transportation planning	8	6	2
prediction of trip generation & distribution	16	12	4
prediction of modal split & traffic assignment	16	12	4
Revision	4	3	1

**Teaching And Learning Methodologies :**

Interactive Lec.

Discussion

Problem Solving

Report / Present.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		
First mid-term exam	15.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		
Second mid-term exam	15.00		

**Course Notes :**

Handout notes on MOODLE

**Recommended books :**

"Traffic Engineering", Mcshene W., Prentice Hall