



MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO

Department of Civil Engineering

LESSON PLAN

COURSE TITLE: Transportation and Highway Technology		COURSE CODE: CET206	CREDIT HOURS: 02	MINIMUM CONTACT HOURS: 32
COURSE INSTRUCTOR: Prof. Dr. Agha Faisal Habib Pathan				
Batch: 23BSCET	Semester: 4 th	Semester Starting Date: 09-12-2024	Semester Suspension Date: 18-04-2024	
COURSE LEARNING OUTCOMES: Upon successful completion of the course, the student will be able to:				
CLO No.	Description	Taxonomy level	Associated PLO	
1	Explain concepts of transportation systems and its planning.	C2	1	
2	Use fundamental concepts of Highway geometry, traffic operations and Highway Design for effective traffic system implementation.	C3	1	

LESSON CONTENTS AND ASSOCIATED CLO(s)				
Contents	CLO No.	Marks Assigned	Delivery Methods	Assessment Methods (Marks)
<ul style="list-style-type: none"> Introduction to Transportation Systems and Planning Modes of transportation, Principles of planning for communication facilities (road network, rail-road network & airport, port, and harbor facilities), Planning process and mode choice decisions, Overview of Mass Transit Systems (Total Classes 10) 	1	22	<ul style="list-style-type: none"> •Class Lecture •Discussion 	<ul style="list-style-type: none"> •Class Test(07) •Mid semester Exam (15)
<ul style="list-style-type: none"> Geometric Features of Highway Functional classification of roads. Design controls of Vehicle, Speed, Driver, Volume and Sight Distances Horizontal and Vertical Alignments Horizontal curves, Vertical Curves, Transition, curves, Grades Super-elevation, Attainment of super elevation. Pavement Types and Loads Types of Pavements, Pavement Layers, Wheel loads, Equivalent Single Axle load, Repetition & impact factors, Constructions / Maintenance of pavement, Construction Equipment. Pavement Construction and Equipment Construction Techniques, Mixing of Asphalt, Compaction of layers, Construction Equipment used in field. Traffic Operations Introduction, Highway safety, Traffic control devices, Traffic sign, Traffic signals, Capacity Analysis, Traffic Management. (Total Classes 22) 	2	28	<ul style="list-style-type: none"> •Class Lecture •Discussion 	<ul style="list-style-type: none"> • Assignment (08) • Final Exam (20)

ASSESSMENT DETAILS

S. No.	Assessment Activities	Marks	Activities	CLO(s) to be assessed
1	Class Test/Assignment	15	Class Test	1
			Assignment	1
2	Mid Semester Exam	15	1	1
3	Final Semester Exam	20	1	2

Prepared by: **Prof. Dr. Agha Faisal Habib**



Signature:

Dated: 03-12-2024

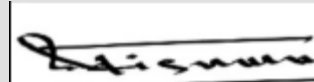
Reviewed by: **Curriculum Review Committee**



Signature:

Dated: 20-12-2024

Approved by: **Chairman, CED**



Signature:

Dated: 20-12-2024