

Course Title-Course Code: CE 581 TRAFFIC ENGINEERING 1							Name of the Programme:CIVIL ENGINEERING		
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.	Field Study	H W	Other	Total	Credit	ECTS Credit
1-2	42	0	0	0	70	76	188	3	7.5
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	-								
Course Contents	Detailed study of the transportation planning process, inventory of existing travel demand, different types of O-D studies, analysis and model building, trip generation, trip distribution, modal split and trip assignment techniques, forecasting and plan evaluation. Introduction of basic concepts relevant to driver, vehicles and road. Traffic accidents and statistics in Turkey and in the world. Traffic engineering studies. Review of engineering statistics. Introduction macroscopic traffic flow theory. Capacity and level of service concepts. Capacity and level of service analysis of highway and freeway segments.								
Course Objectives	Introduction of concepts relevant to traffic engineering practice and acquisition of basic principles of macroscopic traffic flow theory. Introduction of highway capacity methodologies for analysis of highways and freeways.								
Learning Outcomes and Competences	Understanding of the principles and the procedures of macroscopic traffic flow theory and acquisition of knowledge and skills to perform capacity and level of service analyses of highways and freeways.								
Textbook and /or References	1. Garber, N.J. and Hoel, L.A., "Traffic and Highway Engineering, 2 nd Ed.", PWS Brooks and Cole Publishing, Pacific Grove, CA, 1999. 2. Roes, R.P., McShane, W.R., and Prassas, E.P., "Traffic Engineering, 2 nd Ed.", Prentice Hall, Upper Saddle River, New Jersey, 1998. 3. Mannering, F.L. and Kilareski, W.P., "Principles of Highway Engineering and Traffic Analysis", John Wiley and Sons, Singapore, 1990. Pline, J. L.(ed), "Traffic Engineering Handbook", 4 th Ed., Prentice Hall, New Englewood Cliffs, New Jersey, 1992. May, A.D., "Traffic Flow Fundamentals", Prentice Hall, Englewood Cliffs, New Jersey 1990.								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	30
	Quizzes								
	Homeworks							X	30
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam							X	40
Instructors	Asst. Prof. Dr. Cemal AYVALIK								

