

Traffic Studies: TR 681 Fall 2002

This course focuses on the characteristics of traffic flow and their quantification and analysis through field studies of various sorts. Parametric measures – speed, flow, density, headway, spacing, etc. – will be defined and illustrated. Uninterrupted and Interrupted flow characteristics will be compared and discussed, including historic trends. Basic studies on traffic volumes, speeds, travel times, parking, and accidents will be treated. Statistical analysis of the data will be demonstrated.

Textbooks: Traffic Engineering by Roess, McShane, and Prassas
Recommended: Schaum's Beginning Statistics

Week 1:	Introduction	Monday, September 9
NO CLASSES MONDAY September 16th, School Closed.		
Week 2:	Components of the Traffic Stream	Tuesday, September 17
Week 3:	Volume Studies	Monday, September 23
Week 4:	Actual Data Collection Workshop and Use of Spreadsheets for Data Analysis	Monday, September 30
Week 5:	Speed Studies, Travel Time Studies, Delay Studies	Tuesday, October 7
Week 6:	Statistics <ol style="list-style-type: none">1. Real randomness2. Distributions3. Histograms and distributions4. Mean, Variance, standard deviations, etc.5. confidence bounds, sample sizes6. hypothesis testing	Wednesday, October 16
Week 7:	Surveys/ Do actual survey	Monday, October 21
Week 8:	Midterm	Monday, October 28th
Week 9:	Accident Studies	Monday, November 4
Week 10:	Parking Studies	Monday, November 11
Week 11:	Regression Analysis	Monday, November 18
Week 12:	SPSS	Monday, November 25
Week 13:	Review	Monday, December 2
Week 14:	Final Exam	Monday December 16