

CE 367T - FALL 2008

(15800)

TRAFFIC ENGINEERING

- Instructor:** Dr. Randy Machemehl
- Office:** ECJ 6.908
- Phone:** 471-4541
- E-mail:** rbm@mail.utexas.edu
- Office Hours:** MW, 3:00 - 4:00 p.m., other times by appointment
- Lecture:** TTH 12:30 p.m. - 2:00 p.m., ECJ 6.406
- Textbook:** *Traffic Engineering*, Third Edition, by Roess, Prassas, and McShane, Pearson Prentice Hall, Upper Saddle River, NJ, 2004
ISBN 0-13-142471-8
- Course Supplement:** Class Notes Optional (*Available at Speedway Printing*)
Notes available at <http://courses.utexas.edu>

Prerequisites for CE 367T:

CE 321 (Transportation Systems) or consent of instructor

Homework:

Homework problems are normally due the next class meeting after assigned. All problems must be handed in at the beginning of the period in which they are due. After this time, they are considered late; however, all assigned problems must be handed in before the final exam or the instructor will consider the student's work incomplete and will award grades accordingly.

Attendance:

Attendance at all scheduled class meetings is mandatory. A sign up sheet will be circulated each class period.

Testing and Examination Policy:

Make-up exams will NOT generally be given. If a student is absent from a scheduled exam due to medical or other problems beyond his/her control, the instructor may increase the grade percentage for the other exams, thus avoiding a grade of zero for a scheduled exam. The exam schedule is as follows:

Mid-term Exam	Thursday	16 October, 2008
Final Exam	Saturday 7:00 - 10:00 pm	13 December, 2008

Grading Policy:

Grades will be based on the following:

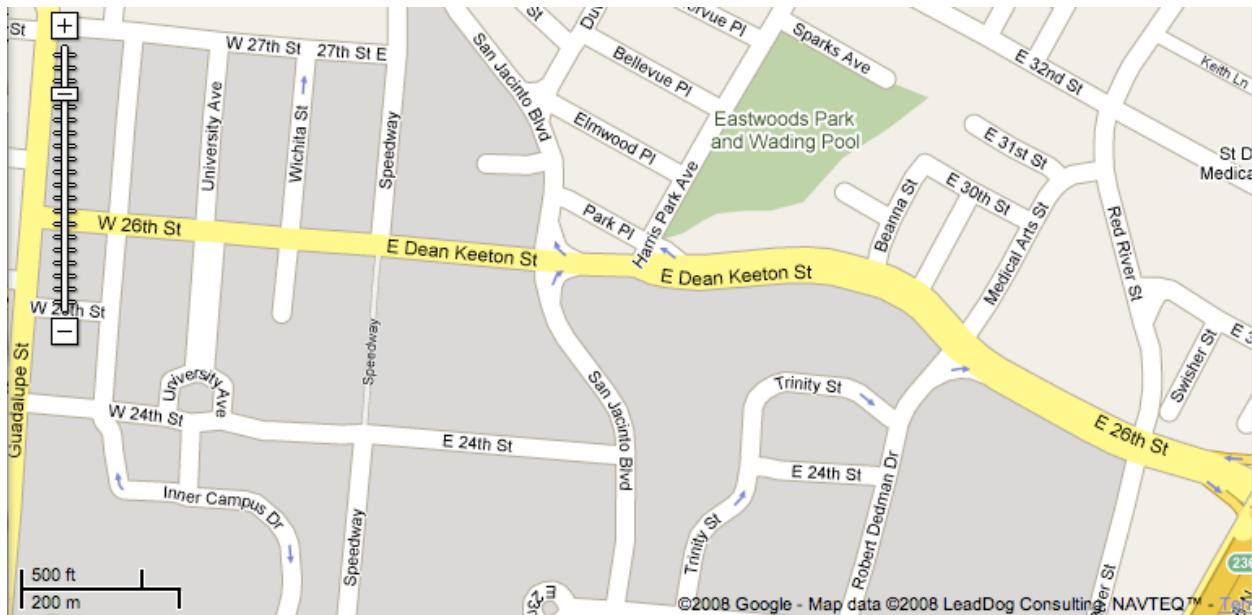
ITEM	DATE	PERCENTAGE
Mid-term Exam	Thursday, 16 October 2008	35
Homework (6 to 9 problems)		15
Project: - Oral Portion		5
Project: - Written Portion		10
Final Exam	Saturday, 13 December, 7:00 - 10:00 pm	35
Total Points		100

Team Project Summary:

Class participants will be members of teams that will conduct traffic analyses of seven intersections along Dean Keeton (26th Street) or an arterial analysis team that will analyze Dean Keeton from Guadalupe St to its intersection with I 35 (See Google map below). Each team will be responsible for collecting its own data, performing appropriate analyses, developing simulation models for trial and error solution testing and making recommendations. The approximate schedule for this activity is as follows:

- Phase 1. Data collection, complete by 30 September
- Phase 2. Analyses, complete by 23 October
- Phase 3. Simulation modeling, complete by 14 November
- Phase 4. Recommendations development, complete by 25 November

A Technical Memorandum will be due describing work by each team for each phase on the specified completion date. Each team will make a presentation to the class describing their work on Tuesday December 2.



Course Instructor Evaluation Plan:

The School of Engineering Course-Instructor Survey will be used as the basic evaluation tool. All students are encouraged to submit written comments during this survey. The survey will be handed out for completion on the last day of class.

Important Dates:

September 1, 2008	Monday	Labor Day Holiday.
September 2, 2008	Tuesday	Last day of the official add/drop period; after this date, changes in registration require the approval of the chairman and usually the student's dean.
September 12, 2008	Friday	Twelfth class. Last day to drop a course for a possible refund.

September 24, 2008	Wednesday	Last day to drop a course without a possible academic penalty.
October 22, 2008	Wednesday	Last day an undergraduate student may, with the dean's approval, withdraw from the University or drop a course except for urgent and substantiated, nonacademic reasons.
November 27-28, 2008	Thurs/Fri	Thanksgiving Holidays.
December 5, 2008	Friday	Last class day.
December 13, 2008	Wednesday	CE 367T Final Exam, 2:00 - 5:00 p.m.

NOTE:

"The University of Texas at Austin provides, upon request, appropriate academic adjustments for qualified students with disabilities. Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Services for Students with Disabilities area of the Division of Diversity and Community Engagement at 471-6259 as soon as possible to request an official letter outlining authorized accommodations. For more information, contact that office at 471-6259, Video Phone 232-2937, or the School of Engineering Director of Students with Disabilities at 471-4321."

Class Web Sites and Student Privacy:

Web-based, password-protected class sites will be associated with all academic courses taught at The University. Syllabi, handouts, assignments and other resources are types of information that may be available within these sites. Site activities could include exchanging email, engaging in class discussions and chats, and exchanging files. In addition, electronic class rosters will be a component of the sites. Students who do not want their names included in these electronic class rosters must restrict their directory information in the Office of the Registrar, Main Building, Room 1. For information on restricting directory information, see the General Information Catalog or go to:

<http://registrar.utexas.edu/catalogs/gi07-08/app/appc02.html#Chapter-9-Educational-Records>.

School of Engineering Drop Policy:

Undergraduate Students: From the 1st through the 12th class day, an undergraduate student can drop a course via the web and receive a refund if eligible. From the 13th through the 20th class day, an automatic Q is assigned, no refund; approval from the Dean and departmental advisor is required. From the 21st class day through the mid-semester deadline, approval is required from the Dean, instructor of the course and departmental advisor.

Graduate Students: From the 1st through the 4th class day, graduate students can drop a course via the web and receive a refund. During the 5th through 12th class day, graduate students must initiate drops in the department that offers the course and receive a refund. After the 12th class day, no refund is given. No class can be added after the 12th class day. From the 13th through the 20th class day, an automatic Q is assigned with approval from the Graduate Advisor and the Graduate Dean. From the 21st class day through the last class day, graduate students can drop a class with permission from the instructor, Graduate Advisor, and the Graduate Dean. **Students with 20-hr/week GRA/TA appointment or a fellowship may not drop below 9 hours.**

University Scholastic Dishonesty Policy:

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. For further information, visit the Student Judicial Services web site:

<http://deanofstudents.utexas.edu/sjs/>

and the General Information Catalog information at

<http://registrar.utexas.edu/catalogs/gi07-08/app/appc03.html#Chapter-11-Student-Discipline-and-Conduct>.

CE 367T Topics and Text Reading Assignments – Fall 2008

TOPIC	TEXT PAGES
Introduction, Transportation Systems	1 - 15
Road User Characteristics	17 - 26
Vehicle Characteristics	27 - 36
Roadway Characteristics	38-70
Manual on Uniform Traffic Control Devices	71-103 and MUTCD (online)
Traffic Laws	Notes
Single Intersection Traffic Control Concepts	131-156
Signal Timing (Pre-timed Signals)	445-537
Micro-Simulation Techniques	Notes
Signal Timing (Actuated Signals)	565-582
Signalized Intersection Capacity Analysis	585-644
Traffic Signal Systems	684-717
Progression, Signal Coordination	726-737
Signal System Software	Notes
Freeway Traffic Flow	106-115 & Notes
Basic Freeway Sections, Capacity Analysis	290 - 331
Freeway Weaving Analysis	335 - 350
Freeway Merging/Diverging	351-370
Freeway Bottlenecks and Shock Waves	Notes
Freeway Traffic Simulators	Notes
Parking Facilities	263 - 286
ITE Trip Generation Procedures	Notes