

CEE 371: Introduction to Transportation Planning and Analysis
CEE 479: Transportation Systems Planning and Management
Syllabus

In these jointly-taught courses we will study transportation systems and transportation planning through the lens of a contemporary challenge: sustainability. We will examine current characteristics and problems of transportation systems, principles and relationships underlying traveler and shipper behaviors and transportation choices, planning and problem solving processes, options for achieving sustainability, and some methods for analyzing and predicting the system performance.

We will do this through a combination of lectures and discussions and team-based case studies through which we will pursue sustainability step by step and for different components of the transportation system. While the concepts and methods covered will be general, and the case study teams will investigate different aspects of the transportation system, the lectures will focus on the U.S. urban passenger system.

The two courses are taught jointly to encourage interaction among students with a wide range of experiences and perspectives, permitting peer teaching and learning. Case study teams will mix graduate and undergraduate students, but assignments and exams will differ between classes and will be graded separately.

We will rely on readings distributed through Blackboard as files or links, and occasionally on handouts: <https://courses.northwestern.edu/webapps/login/>. We will also distribute and use a self-instruction CD on travel demand forecasting.

Expectations for students:

- The class will use a lecture-discussion format. Students should come to class prepared to participate based on readings, assignments, and observations of the world that relate to transportation. Participation in class discussions will contribute about 10% of the term grade.
- Attendance and attention are expected and required. Students may not use class times to play computer games, search the Web, use e-mail or text messages.
- Team case studies will be assigned and progress presentations will be required bi-weekly in the Friday Lab sessions. These will be group analysis and problem solving exercises, and the products will be brief, written reports and strong oral briefings. Case studies will be worth about 40% of the term grade.
- There will be occasional short written assignments linked to readings. These will be submitted electronically using the Blackboard electronic drop box by midnight on the due date. Homework will be worth about 10% of the term grade.
- One hour midterm (20%) and final (20%) examinations will be required.
- Stay in touch through the Blackboard site and e-mail.

Class meets in Tech L361 MWF 2:00 - 3:50 p.m. Friday meetings will be for case study presentations and discussion sessions. We expect to meet every Friday, but if

cancellations occur, they will be announced in advance. Prof. Schofer is usually available to meet students after class and at other times by appointment - use e-mail to schedule.

Instructor:

Prof. Joseph L. Schofer
Ford 1-225 or Tech L-272
Phone: 491-8795 or 5221
j-schofer@northwestern.edu

Teaching Assistant:

Emily R. Kushto
e-kushto@northwestern.edu