Course Description: CVEEN 5-6540SL Community Transportation

Offered Autumn

Catalog Data

3 Credits Cross-listed as URBPL 5720, a service-learning course that addresses real community traffic and transportation issues. Students work with neighborhood and community groups.

Textbook

None

Coordinator: Peter T. Martin

Goals

The Community Transportation course has been designed to provide you with an insight into of the way traffic engineering and traffic engineers relate to community issues associated with transportation planning, traffic control and management techniques

Prerequisites

CVEEN 3520 or instructor consent

Topics

The topics are driven by the nature of the community projects developed by class members. In recent years, topics addressed have included:

- Traffic Calming
- Speed Studies
- Rat running
- Subdivision development
- Paratransit Systems
- Highway & Traffic Safety
- Forecasting Travel Demand
- Evaluation of Transportation Alternatives

• Transportation Systems Management

Computer Usage

Individually supervised analyses

Laboratory Projects

Students are required to engage community groups and local publicly employed traffic professionals. They will meet, discuss and prepare written reports on their projects. There will be at least two formal meetings where class members will engage the community culminating in formal presentation of designs. Fieldwork will supply and supplement information. Field studies are by the nature of the community projects developed by class members. In recent years, practical exercises included:

- Radar speed gun tests
- Visual Speed monitor and display
- Flow measurement
- Headway measurements
- Gap acceptance observation
- Origin and Destination studies
- Signal warrant analyses
- Signal coordination analyses

Course Content

The course addresses the roles, responsibilities and characteristics of all road users of all ages. In applying traffic flow theories to real problems, Traffic Engineers must:

- engage local communities with a need
- identify local concerns
- present alternative engineering solutions
- secure local support throughout implementation

The course will, therefore:

- be addressing real traffic problems in real communities
- relate to the practical application of the theory provided formally in class

- enable students to follow the way that theoretical principles help the professional engineer to help communities to resolve transportation problems
- enhance civic education through your exposure to the complex interaction between

small local groups and municipal authorities