

CE 4710/5710

Case Studies in Transportation

Fall 2009



Norman W. Garrick

Instructor

FLC 330

(860) 486-2990

MW 4:00 - 5:15 pm FLC 212

Office Hours MW 2:30 - 3:30

Chris McCahill

Teaching Assistant

FLC 205

Course Description

Schedule

Course Description

Course Overview and Objectives

This course is for new Transportation and Urban Engineering graduate students and for advanced Civil Engineering undergraduates. The course objectives are as follows:

- Develop an understanding and knowledge of the elements of effective transportation planning
- Develop an understanding of the interdependency of transportation and land use planning
- Foster knowledge of the societal impact of transportation decisions
- Foster knowledge of the economic, political and institutional structures that govern transportation policy making
- Improve written and oral communication skills

This class is fundamentally about transportation and land use planning. We will study cities that I consider to be some of the most advanced in terms of their transportation and land use planning. The goal of the class is to learn from these cities: How and why did they develop their approach to planning? What goals are they trying to advance? What procedures and techniques did they implement to achieve their goals? What changes were needed in policy and governance in order to achieve their goals? How successful have these places been in moving towards their goals?

Course Format

The course will be organized around the study and analysis of transportation and land use planning in selected cities both in the USA and overseas. The students will conduct research, analyze and report on the work being done in their assigned city. They will report their findings both in oral and written form. The semester will be structured to provide the students with multiple opportunities for critique and

feedback on their work. Class periods will include lectures, group discussions, project work and oral reports from the students. The students are expected to be active learners who fully participate in the discussion and evaluation process during the semester.

2009 Cities for Case Study (tentative)

Bogotá, Columbia	Cambridge, MA	Copenhagen, Denmark
Curitiba, Brazil	Freiburg, German	Portland, OR
Seattle, WA	Stockholm, Sweden	Washington, DC
	Zurich, Switzerland	



Design Project

The projects will have both an individual and group component. However, each student will be fully responsible for their own section of the report. The exams will be based on the readings for the HW assignments, the classroom discussions and on all the project reports. CE 5701 student will each be assigned the task of preparing two or more study guides for the various projects.

Course Grading

Presentations	20 %
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Project Reports	25 %
Homework	10 %
Mid-term Exam	20 %
Final Exam	25 %
Total	100 %

Reading List

Cervero, Robert, The Transit Metropolis - A Global Inquiry, Island Press, 1998.

Marshall, Alex, How Cities Work: Suburbs, Sprawl and the Road Not Taken, University of Texas Press (January 2001)

Munford, Lewis, The Highway and the City, Mentor Book, 1963

Newman and Kenworthy, Sustainability and Cities: Overcoming Automobile Dependence, Island Press (1999)

Plowden, Steven, Towns Against Traffic, Deutsch (1972)

Course Schedule

		DATE	SUBJECT	
Lectures for Background Knowledge	01	M – Aug 31	1. Back Roads, Cities and Transportation PDF PPT	
	02	W – Sept 02	2. The Basis of Transportation Planning DOC PPT	
		M – Sept 07	Labor Day	
	03	W – Sept 09	3. Cities and Transportation Reading: <u>Marshall - Chapter 2 pg 41 - 59</u> PDF Classnotes PPT	H
	04	M - Sept 14	4. <u>The Highway and the City</u> Reading: <u>Mumford Ch 22</u> PDF Classnotes PPT	
	05	W – Sept 16	5. <u>Transportation and City Form</u> Reading: <u>Newman and Kenworthy Ch 3: pg. 68 to 78 and 111 to 127</u> PDF Classnotes PPT	H
	06	M - Sept 21	6. <u>Multimodal Transportation</u> Reading: <u>Cervero Ch 2 pg 41-53</u> PDF Classnotes PPT	
	07	W – Sept 23	7. <u>Streets and Cities</u> Classnotes PPT	

	08	M - Sept 28	8. The Role of Government <i>Readings: Marshall - Chapter 6 pg 133 - 144</i>	H
Introduction to Case Studies	09	W - Sept 30	Present Cities for Case Study Presentation, Writing, Researching, Critique 9. Technical Presentations (PP)	H
	10	M - Oct 05	Fundamentals of Effective Transportation Planning 10. Effective Transportation Planning	Pr
	11	W - Oct 07	Mid-term Exam (in CLAS 108)	
Project Work	12	M - Oct 12	<i>Group Work Day - Computer Lab</i>	
	13	W - Oct 14	<i>Group Work Day - Computer Lab</i>	
	14	M - Oct 19	<i>Group Work Day - Computer Lab</i>	
	15	W - Oct 21	Group Presentation 1	
	16	M - Oct 26	Group Presentation 1	
	17	W - Oct 28	<i>Group Work Day - Computer Lab</i>	
	18	M - Nov 02	<i>Group Work Day - Computer Lab</i>	
	19	W - Nov 04	<i>Group Work Day - Computer Lab</i>	
	20	M - Nov 09	Group Presentation 2	
	21	W - Nov 11	Group Presentation 2	
	22	M - Nov 16	<i>Group Work Day - Computer Lab</i>	
	23	W - Nov 18	<i>Group Work Day - Computer Lab</i>	
		M - Nov 23	Thanksgiving Break	
		W - Nov 25	Thanksgiving Break	
Final Report and Presentation	24	M - Nov 30	<i>Group Work Day - Computer Lab</i>	
	25	W - Dec 02	<i>Group Work Day - Computer Lab</i>	
	26	M - Dec 07	Group Presentation 3	
	27	W - Dec 09	Group Presentation 3	

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