

CE 436/CE 531--PEDESTRIAN AND BICYCLE TRANSPORTATION

Spring 2008

I. Instructor:

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II. Textbook (may be accessed at <http://www.tfhrc.gov/safety/pedbike/pubs/05085/index.htm>)

*FHWA UNIVERSITY COURSE ON BICYCLE AND PEDESTRIAN TRANSPORTATION:
STUDENT WORKBOOK*

Federal Highway Administration
Washington, DC, July 2006

III. Lecture Outline: Attached is an outline of the topics to be covered during the semester. Reading assignments in the text are also indicated. Additional reading assignments may be made during the semester.

IV. Grading: Grades will be determined by averaging the mid-term exam (25%), the final exam (25%), homework problems (35%), and the term paper (15%).

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Course Outline

<u>Topic</u>	<u>Reading Assignment</u>
1. Introduction	
Need for Pedestrian and Bicycle Mobility	Sect. 1.1-1.4 and 1.6-1.7
Transportation Demand Management	Handout
Walking and Bicycling in the US Today	Sect. 2.1-2.5
2. Characteristics of Pedestrians	Sect. 8.1-8.5
Ambulation/Safety Concerns	
Groups of Particular Concern	
3. Planning	
Federal Requirements/Funding Opportunities	Sect. 1.5 and Sect. 4.1-4.4
Policies to Encourage Non-Motorized Travel	Sect. 5.1-5.5 and Sect.6.1-6.4
Adapting Suburban Communities for Peds and Bikes	Sect. 7.1-7.8
Traffic Calming	Sect. 20.1-20.6
4. Issues Common to Pedestrians and Bicycles	
Pedestrian and Bicycle Crashes	Sect. 3.1-3.11
Tort Liability and Risk Management	Sect. 22.1-22.6 and handouts
Pedestrian and Bicycle Connections to Transit	Sect. 18.1-18.9
Multi-Use Trails	Sect. 19.1-19.10
Pedestrians and Bicycles in Work Zones	Sect. 21.1-21.4
Facility Maintenance	Sect. 16.1-16.8
Education, Encouragement, and Enforcement	Sect. 24.1-24.7

5. Pedestrian Facility Design	
Walkways, Sidewalks and Public Spaces	Sect. 9.1-9.7
Pedestrian Facility Capacity and Level of Service	Handouts
Pedestrian Signs and Pavement Markings	Sect. 10.1-10.11
Pedestrians at Intersections	Sect. 11.1-11.10
Midblock Crossings	Sect. 12.1-12.11
Accessibility (ADA)	Sect. 8.6 and handouts
6. Bicycle Facility Design	
Characteristics of Bicyclists	Handouts
Shared Roadways	Sect. 14.1-14.8
Bike Lanes	Sect. 15.1-15.8
Bicycle Parking and Storage	Sect. 17.1-17.4
7. Wrap-Up	
International Approaches to Ped/Bike Facilities	Sect. 23.1-23.4
Other Topics	