

ENVS 196: Developing a Pedestrian Plan (Senior Seminar)

Winter 2016, MW 3.30-5.30, ISB 221

Instructor

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Office Hours: Wednesdays, 11.15am-1.15pm

Course Description

Walking is the ultimate in environmentally sustainable transportation. So how can we encourage people to walk more – improving their health, while reducing congestion and pollution from motor vehicles? This course will consider how cities, and in particular, university campuses can promote walking, and improve the safety and comfort of those on foot. We will examine a range of strategies to increase pedestrian travel and safety. What street designs work best? How can pedestrian planning change travel behavior? How can pedestrian improvements best be funded? How do topography and climate affect pedestrian circulation? We will then apply these lessons to the UCSC campus, and working closely with UCSC Transportation and Parking Services staff, provide analysis and recommendations for the new UCSC Pedestrian Plan.

Course Goals

After completing this course, you should be able to:

- Identify and critically analyze factors that affect pedestrian travel and safety
- Critically evaluate the merits of different approaches to manage conflicts between pedestrians and other road users, such as bicyclists and vehicles
- Understand the opportunities and constraints that affect a city or university's ability to implement a pedestrian plan
- Develop technical abilities in mapping, data collection and analysis, and/or professional report writing
- Develop team-working and project management skills

Textbook

There is no textbook for this course. All required readings will be posted on eCommons.

Field Visits

Field visits are an integral component of the course. They will help you connect what you observe on the ground with the theories discussed in class, and help inform your own judgments about the theories and readings. The following field visits are mandatory. Do not take this course unless you can attend both of them. (If you are taking ENVS 140, which meets MW at 7pm, please talk with me prior to enrolling.)

1. UC Berkeley: January 25, leave 3.20pm sharp, return late that evening
2. Stanford: February 3, leave 3.20pm sharp, return late that evening

Class Participation and Leadership

This is a small seminar, and your active participation is essential to making this course successful and enjoyable. This class is also a unique opportunity to help improve transportation at UCSC. Neither the professor nor the staff at TAPS have all the answers (if we did, we wouldn't have this class), and we are relying on you to bring your ideas, skills, experiences and energy.

For many of the classes, two students will be responsible for leading the discussion. This entails:

- In advance of class, synthesizing discussion questions and comments posted by other students on eCommons
- Providing a 5-minute introduction to that day's topic based on the readings
- Initiating and helping to facilitate the discussion

Sign up for a slot during the first week of class.

In addition, before each class, all students should post to eCommons 1-2 brief discussion questions and/or comments on the readings for that class. These are due at 5PM the day before (i.e. Sunday at 3.30PM for a Monday class, or Tuesday at 3.30PM for a Wednesday class). These posts might include a question that was sparked by one of the readings, a broad comment on or reaction to the readings, or an example that further illustrates a concept from the readings.

Course Schedule (subject to change)

We will meet on Mondays and Wednesdays, 3.30-5.30pm (later on days when we have field trips). You should all have Fridays, 3.30-5.30 clear in your class schedule. **Please keep that free to facilitate your group work, and for other class purposes.**

Class	Date	Topic	Required Readings
1	Jan 4	Introduction. Why promote walking? Walking tour of central campus	Balsas 2003 Toor & Havlick 2004, Introduction and Ch 1
2	Jan 6	Why do people walk? The factors that affect mode choice	Handy & Mokhtarian 2005 Forsyth & Krizek 2010 Toor & Havlick 2004, Ch 5 (pp 136-142; skim rest) Joh et al. 2012 (pp 219-222 and conclusion)
3	Jan 11	Tools to analyze pedestrian travel: doing a pedestrian audit	Gehl & Svarre 2013, Ch 3 Clifton et al. 2007 Hutabarat Lo 2009 Kelly et al. 2011 (skim)
4	Jan 13	OpenStreetMap for the UCSC campus	Sawyers 2014 OpenStreetMap Beginners Guide
	Jan 18	<i>No class – MLK Day</i>	
5	Jan 20	Pedestrian planning in Santa Cruz Guest speaker from City – Claire Fliesler	Draft Santa Cruz Active Transportation Plan
6	Jan 25	Field trip to UC Berkeley. <i>Note: we will not return to Santa Cruz until 9PM</i>	TBD
7	Jan 27	The anatomy of a pedestrian plan	Stangl 2011 Choose one pedestrian plan to review
8	Feb 1	Designing for walking: Intersection design and crosswalks	FHWA 2006, Chs 11 and 12 NACTO 2014, Intersections and Intersection Design PBIC 2015, Facility Design, section on Crossings AASHTO 2004, Ch 3.3 (skim)
9	Feb 3	Field trip to Stanford University. <i>Note: we will not return to Santa Cruz until 9PM</i>	TBD
10	Feb 8	Designing for walking: Urban design and “naked streets”	Hamilton-Baillie 2008 NACTO 2014, Street Design Elements San Francisco 2011 Better Streets Plan, Ch 6 Los Angeles 2008, Walkability Checklist
11	Feb 10	Walking and the natural environment Guest: Alex Jones	TBD
	Feb 15	<i>No class – Presidents Day</i>	
12	Feb 17	Workshop: Developing a hierarchy of paths at UCSC	
13	Feb 22	Designing for people with disabilities Guest: Susan Willats	FHWA 2006, Ch 8
14	Feb 24	Workshop: Developing prioritization criteria to rank improvements	
15	Feb 29	Workshop: Draft plan proposals	
16	Mar 2	Pedestrian safety Guest: Nader Oweis	Loukaitou-Sideris et al. 2014 PBIC 2015, University Campuses
17	Mar 7	Walking in a broader transportation demand management plan Guest: Prof. Billy Riggs (Cal Poly SLO)	Riggs 2015 Toor & Havlick Ch 2
18	Mar 9	Presentations of final proposals	

Graded Assignments

All written assignments must be submitted via eCommons in PDF format, unless otherwise requested

Case study	(draft report)	15%
	(final report)	20%
	(oral presentation)	5%
UCSC analysis	(draft report)	15%
	(final report)	20%
	(oral presentation)	5%
Reflection on public meeting		10%
Class participation		10%

Case Study

Draft due: Varies (sign up for a slot during Week 1 of class).

Final due: One week after your presentation

You will develop a case study of pedestrian planning on a university campus or similar type of campus environment. What are the specific practices, policies or projects that other places can learn from and emulate? What are the most important lessons learned, and what are the implications for planning at UCSC? You will submit a written report (draft and final) and also present your case study in class.

Potential case study locations and more detailed guidance on the format and topics to be covered in each case study will be distributed in Week 1.

You should hand in your draft written case study at the start of the class in which you present your case study. Some flexibility will be granted to students who present in the first half of the quarter, as long as this is agreed with Prof. Millard-Ball in advance.

UCSC Analysis and Recommendations

Draft due: Wed March 2, start of class

Final due: Fri March 18, 5PM

Working in teams of three, you will provide analysis and recommendations regarding pedestrian travel in a geographic section of the UCSC campus. More detailed guidance on the format and topics to be covered will be distributed in Week 1.

Reflection on Public Meeting

Due: Mon March 14, 5PM

You should attend a meeting of the City Council or Transportation and Public Works Commission or a public meeting for the City's Active Transportation Plan. A list of potential meetings where pedestrian issues are on the agenda will be provided on eCommons. Submit a 2-page reflection paper. More details will be provided early in the quarter.

Class Participation

Your class participation grade will include attendance and active participation in class, and discussion leadership. Two absences will be allowed with no deduction, but repeated absences will reduce your participation grade. Your questions and comments on the readings, as posted on eCommons, will also contribute to your participation grade.

Late Submission of Assignments

Students can make a formal request to the professor for special consideration for an extension to an assignment due date. This request should be received at least 48 hours before the due date.

Otherwise, **ten percent** will be deducted for every 24-hour period an assignment is late. *Due at the start of class means 3.30pm sharp, so an assignment handed in at 4pm will incur a 10% deduction. Poor organization is not a valid reason for an extension of the due date.*

Academic Integrity

Students are expected to adhere to the UCSC policy on academic integrity - http://www.ucsc.edu/academics/academic_integrity/. All assignments should be written individually and be original works for this class. All academic integrity violations (e.g. plagiarism, cheating, multiple submissions, facilitating dishonesty) will be prosecuted if encountered. Please talk with Prof. Millard-Ball IN ADVANCE if you are unsure about citation styles or what may violate the academic integrity policy.

Accessibility and Disabilities

If you have any mobility or other limitations that may affect participation in field visits, please contact Prof. Millard-Ball before the quarter starts. This will help inform planning for transportation and field visit activities.

If you qualify for classroom accommodations because of a disability, please submit an Accommodation Authorization from the Disability Resource Center (DRC) to Prof. Millard-Ball **within the first two weeks of the quarter**. You may submit these outside of class (e.g., office hours) to ensure anonymity. Contact DRC at 831-459-2089 (voice), 831-459-4806 (TTY), or <http://drc.ucsc.edu> for more information on the requirements or process.