

## TTP 282 Transportation Orientation Seminar

Fall 2009

Instructor: Susan Handy  
CRN: 41718  
Units: 1  
Grading: S/U  
Time: 11:00 – 11:50 am Fridays  
Location: 2022 Academic Surge (ITS Conference Room)

This seminar is required for first year Transportation Technology and Policy (TTP) students and is recommended for first year transportation students in Civil and Environmental Engineering and open to students from other programs interested in transportation. The goal of this seminar is to provide a broad overview of the transportation field and to give students a general framework that will help them understand how different topics within transportation fit together. In addition, the seminar will ensure students gain at least nominal exposure to basic concepts, standard practices, and new innovations across the transportation field. The seminar offers students the opportunity to get to know other transportation students, learn about the interests of different transportation faculty, and reflect on their own interests in the transportation field.

The requirements for receiving a “satisfactory” grade at the end of the quarter are as follows:

- 1. Attend and participate in the 10 scheduled seminars over the 11 weeks of the quarter.** If you cannot attend one of the seminar sessions, you must explain your absence to me ahead of time, if possible. The schedule, which is subject to change, is attached.
- 2. Complete a journal over the course of the quarter.** This is an intellectual journal rather than a personal journal: the purpose is to reflect on ideas presented in the seminar and to practice formulating, developing, and articulating your own ideas.

You must complete a journal entry following each seminar. I define a journal entry as at least 15 minutes of writing (by computer, typewriter, or by hand). This is a free-writing exercise: you should write spontaneously, authentically, and without editing. If you prefer to proofread and correct errors, please do so only after completing **15 minutes of free writing** – not while drafting your entry.

Things you might think about when writing your entry: How does the material relate to things you’re learning in other classes? How does the material relate to your experience, professional or personal? Was anything particularly intriguing about the material? What questions do you have that weren’t answered during the seminar?

**Submit your journal entry to me at the beginning of the next seminar, in hardcopy.** Journal entries must be completed satisfactorily to pass this course. However, I will not assign grades to the entries or comment on writing style or grammatical correctness. You must submit at least **9 journal** entries to get credit for the seminar. If you need to miss more than one session, you can complete make-up assignments to get to a total of 9 submissions.

**3. Read what you want.** I’ll be posting articles and links of potential interest on my website: <http://www.des.ucdavis.edu/faculty/handy/>. Please forward articles to me you think others might be interested in: slhandy@ucdavis.edu

Tentative Schedule:

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Person</b>	<b>Concepts Covered</b>	<b>Related Courses</b>
1	9/25	Defining the problem	Handy	Travel needs, environmental impacts, financial constraints	TTP220, ESP/ECI 252, ECI/ESP 163
2	10/2	Travel behavior	Mokhtarian	Concept of mobility, travel as derived demand, positive utility of travel	TTP200, ECI251; ECI254; ECN145
3	10/9	Who does what	Handy	federal policy, responsibilities by level of government, regional planning	TTP220; ECI269; ESP/ECI 163; ESP/ECI 252
4	10/16	Traffic control	Zhang	HCM, MUTCD, ITS	ECI256
5	10/23	Road design	Handy	Road hierarchy, Greenbook, context sensitive design, street standards, traffic calming	ECI162
6	10/30	Road materials	Harvey	Paving materials and techniques	ECI179; ECI259
7	11/6	Vehicle technology	Erickson	ICE basics; efficiency/safety trade-offs; emerging technologies	TTP210, ESP/ECI 252
8	11/13	Alternative fuels	Ogden	fuel possibilities; distribution channels; adoption	TTP210, ESP/ECI 252
9	11/20	Automobile alternatives	Handy	Transit, bikes/peds, ICT, land use, climate change	TTP220, ESP/ECI 252, ECI/ESP 163
	11/27	Thanksgiving weekend			
10	12/4	Wrap-up	Sperling		ESP/ECI 252