USP 537 ECONOMICS OF URBAN TRANSPORTATION – WINTER 2019

**Professor:** Jenny H. Liu, Ph.D.
**Office:** URB 370F
**Email:** jenny.liu@pdx.edu
**OH:** W 12pm – 1pm and by appointment

**Class Time:** TR 1pm – 3:40pm @ CH449

**Course Website:** http://d2l.pdx.edu

**Readings**
Readings are taken from multiple sources, and may be posted on the course website, found in the library or distributed in class. Some sources may include:

- *Essays in Transportation Economics and Policy* by Gomez-Ibanez et al. (denoted as [GTW] below) – available online via PSU Library ([http://search.library.pdx.edu/PSU:all:CP711883470001451](http://search.library.pdx.edu/PSU:all:CP711883470001451))
- *The Economics of Urban Transportation* by Small and Verhoef
- *Still Stuck in Traffic* by Downs
- *Last Exit* by Clifford Winston
- *Curb Rights* by Klein, Moore and Reja (denoted as [KMR] below)
- Transportation Research Record

**Course Objective**
The transportation system is critical to the functioning of an urban area. The movement of people and goods affects both the productivity and livability of the region. Transportation systems also affect and are affected by land use and location decisions. This course will focus primarily on the application of economics to urban transportation policy and planning. We will examine the supply and demand of transportation markets, the costs and pricing of transportation systems, transportation investment decisions and the regulation/deregulation of such systems.

**Grading & Exams**

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<tr>
<th></th>
<th>Date</th>
<th>Time</th>
<th>Option #1</th>
<th>Option #2</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>02/21 (R)</td>
<td>1:00pm – 2:30pm</td>
<td>10%</td>
<td>20%</td>
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<tr>
<td>Final Exam (online)</td>
<td>03/21 (R)</td>
<td>Before noon</td>
<td>15%</td>
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<tr>
<td>Problem Sets</td>
<td>Various</td>
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<td>20%</td>
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<td>Class Participation</td>
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<tr>
<td>Research Paper</td>
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Your grade will be based on your performance on the exams, problem sets, class participation and research paper (optional). Exam dates are indicated in the above table. Other due dates are listed in the course calendar below. Makeup exams will NOT be given unless there are extenuating circumstances and arranged well in advance with the instructor.

**Problem Sets**

Problem sets will be posted on the class website and may consist of quantitative, graphing, qualitative problems as well as short answer questions. Each problem set will be counted equally. They need to be turned in at the beginning of class on the due dates (email submissions will NOT be accepted). LATE submissions will NOT be accepted, but you will get to DROP YOUR LOWEST PROBLEM SET SCORE. Problem sets will be graded on effort, completeness, correctness and methodology chosen. You may work with your classmates, but you **must** write your own answers (please note all group member names on your problem set).

**Class Participation**

Each student is required to participate in class through listening, adequately preparing for class, providing quality contributions and actively participating in discussions. In addition, you are required to lead one discussion session on an assigned case study topic as part of a group, and to individually present on a transportation finance topic during Week 10 (03/14). For these activities, you will be graded on content, organization and communication. Please upload your presentation file to D2L Assignment Box before class begins.

1. **Case Studies (15%)**
   - **Session leader group:** Your group will need to prepare a 15-20 minute presentation to introduce the case study topic, and facilitate discussion (about 10-15 minutes) of the main points in the reading. The group should be prepared with at least 10 discussion questions. The discussion/presentation may be supplemented with additional sources if you wish.
   - **Rest of class:** In order to constructively engage in discussion, you are required to read one of the assigned papers, and prepare a list of at least 3 key points learned and 3 thoughtful discussion questions on the topic. These learning points and questions should be posted on the discussion board of D2L before class begins.

2. **Financing Transportation (10%)**
   You will be assigned two types of transportation finance instruments. In a 10-minute presentation, you are expected to introduce the two financial instruments, provide examples of its usage in cities around the world, and analyze its economic efficiency, effectiveness, equity and feasibility.
# USP 537 Course Calendar

## I. Introduction & Microeconomic Foundations - Week 1 (01/10) & Week 2 (01/17)

**No class in Week 2 (01/17)** – independent reading and review of case study topics.

- [GTW] Chap 11 – “The Urban Transportation Problem: A Reexamination and Update”
- [KMR] Chap 1 – “Introduction”
- [KMR] Chap 2 – “The Triumph of the Automobile”
- [KMR] Chap 3 – “The Fizzle of Traditional Transit”

## II. Demand for Transportation - Week 3 (01/24) & Week 4 (01/31)

**Due: Problem Set #1 (01/31)**

- [GTW] Chap 2 – “The Demand for Transportation: Models and Applications”
- [GTW] Chap 10 – “Determinants of Motorization and Road Provision”
- [GTW] Chap 13 – “Accessibility and Economic Opportunity”

## III. Transportation, Land Use and Accessibility – Week 5 (02/07) & Week 6 (02/14)

**Due: Problem Set #2 (02/14)**

- [GTW] Chap 12 – “Transportation and Land Use”

## IV. Project Evaluation – Week 7 (02/21) & Week 8 (02/28)

**Midterm Exam (02/21) @ 1:00pm – 2:30pm***

**Due: Research Paper Proposal (02/28) – Optional**

- [GTW] Chap 5 – “Project Evaluation”
## V. Supply and Pricing of Transportation – Week 9 (03/07)

**Due: Problem Set #3 (03/07)**

- [GTW] Chap 3 – “Learning about Transport Costs”
- [GTW] Chap 4 – “Pricing”

## VI. Financing Transportation Infrastructure – Week 10 (03/14)


### Final Exam – Online

Final exam due on 03/21 R @ noon

**Due: Research Paper (03/21 before noon) - Optional**
# Case Study Presentation/Discussion Schedule

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COURSE POLICIES
Portland State is committed to fostering a safe, productive learning environment. Title IX and our school policy prohibit discrimination on the basis of sex, which regards sexual misconduct — including harassment, domestic and dating violence, sexual assault, and stalking. **We expect a culture of professionalism and mutual respect in our department and class.** Please be aware that as a faculty member, I have the responsibility to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination to PSU’s Title IX Coordinator, the Office of Equity and Compliance or the Dean of Student Life and **cannot keep information confidential.** You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to either the Office of Equity and Compliance or the Office of the Dean of Student Life. If you would rather share information about sexual harassment or sexual violence to a confidential employee who does not have this reporting responsibility, you can contact a confidential advocate at 503-725-5672 or by scheduling on-line or another confidential employee found on the sexual misconduct resource webpage. For more information about your obligations and resources for sex/gender discrimination and sexual violence (Title IX), please complete the required student module Creating a Safe Campus in your D2L.

Academic Misconduct Policy
You are expected to display academic integrity and honesty. Academic dishonesty will not be tolerated. The PSU Student Code of Conduct defines academic dishonesty as follows:

1. Academic dishonesty. Academic dishonesty is the act of knowingly or intentionally seeking to claim credit for the work or effort of another person or participation in such acts. This includes, but is not limited to: (a) cheating, (b) fraud, (c) plagiarism, such as word for word copying, using borrowed words or phrases from original text into new patterns without attribution, or paraphrasing another writer’s ideas; (d) The buying or selling of all or any portion of course assignments and research papers; (e) Performing academic assignments (including tests and examinations) for other persons; (f) Unauthorized disclosure or receipt of academic information; (g) Falsification of research data; and (h) Unauthorized collaboration. ([http://www.pdx.edu/dos/psu-student-code-conduct](http://www.pdx.edu/dos/psu-student-code-conduct))

Students are responsible for knowing both in-class behavior and rules governing use of materials in academic work. Plagiarism includes both other students’ work and Wikipedia (or anything from the internet) that is not properly cited. Any student found plagiarizing work or violating any part of PSU’s academic integrity policy will receive a failing grade for the course.

Access and Inclusion for Students with Disabilities
PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. The Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, drc@pdx.edu, [https://www.pdx.edu/drc](https://www.pdx.edu/drc).

- If you already have accommodations, please contact me to make sure that I have received a faculty notification letter and discuss your accommodations.
- Students who need accommodations for tests and quizzes are expected to schedule their tests to overlap with the time the class is taking the test.

Calendar/Schedule
Course calendar is tentative and is subject to change as the instructor deems appropriate. Please check online for any updates.
Research Paper Requirements (Option #1)
If you choose grading Option #1, you are required to turn in a research paper reviewing the literature on an urban transportation topic where there is continuing disagreement relating to economic issues. You will be required to present the conflicting arguments and then evaluate the positions being taken. You will be expected to find a minimum of four to five professional articles of reasonably recent vintage that contribute to the debate, and use these as the basis for your paper. Note that the articles are intended to be mostly research articles in the scholarly literature. This excludes newspaper articles and opinion pieces, and it also excludes many professional articles that simply describe a case study or something similar. In general, most articles should be based on some form of research. You should strive to identify the underlying causes of disagreement, but at the very least you should carefully document what the disagreement is and what arguments each side makes.

All students should plan to use some scholarly literature search procedure. A number of databases are available through the library on the Internet. For example, you may want to use ECONLIT for economics articles or TRIS for a transportation focus. However, you are free to use any reasonable search procedure that focuses on scholarly articles. Topics are open, but the following are some examples:

- Congestion pricing: compare and contrast area pricing (e.g., London), road pricing, (e.g., SR91), and distance pricing (e.g., Puget Sound)
- How do land use policies affect transportation patterns or mode choice?
- What are the primary causes of rising transit cost?
- Does privatization lower the cost of transit?
- Is transit ridership rising or declining?
- Does suburbanization affect walking?
- What cost shares are paid by users of transit and/or automobiles?
- Do heavy vehicles pay too much or too little in road fees?
- Light rail versus bus rapid transit
- Does taxi de-regulation lower cost?
- Is demand management effective?
- Do lower speed limits increase safety?
- Does traffic light pre-emption for buses improve traffic flow?
- How do tolls and road pricing affect the equity of transportation funding?

○ Research paper proposal (due 02/28 by 1pm): 1-2 page written statement of the issue for your paper along with a description of the literature search procedure used and a (preliminary) listing of the articles that you plan to use for the paper.

○ Final paper (due 03/21 before noon): Your research paper should be between 10 to 15 pages long not including tables, figures or bibliography.

○ Sources must be cited in a standard bibliography or footnote format (e.g., APA or Chicago style).

○ Formatting: Times New Roman 12-point font, single-spaced, 1-inch margins

○ Each assignment must be turned in as a PDF file into the Assignments Box on D2L.