

# Transport Economics (SPT-E4050)

Prottoy A. Akbar

Period III, Spring 2022

## OVERVIEW

---

Class Times	Mon 10.15 - 12.45 Thu 9.15 - 11.00	Instructor Office Hours (via zoom)	Prottoy A. Akbar (prottoy.akbar@aalto.fi) Tue & Fri 15.45 - 16.45 or by appointment
Lecture Location	U135a U7 PWC Otakaari 1	TA	William Ogden (william.ogden@aalto.fi)

**Course Description:** This course will introduce the economic concepts underlying the allocation of transportation resources today. We will study how markets for transport services operate in terms of the behavior of consumers and suppliers, when market failures lead to over- and under-provision of some services, how governments can intervene to correct these failures, and how the distribution of transport services affect the urban space itself (such as through housing markets, land use and residential segregation). Finally, we will learn standard econometric modeling techniques that can be used to evaluate the effects of transportation policies and interventions in sparse data settings.

**Textbook:** There are two reference textbooks for the course:

- Cowie, Jonathan. *The Economics of Transport: A theoretical and applied perspective*. New York, NY; Routledge, 2009.
- Veseth, Michael. *Introductory Microeconomics*. New York, NY; Academic Press, 1981.

E-book versions of both textbooks are available at the Aalto library. Click the textbook titles for the links. Both textbooks will only be used as supplemental reference to material covered during the lectures. We will also cover additional materials from some academic papers and lecture notes that will be available on MyCourses.

## EVALUATION

---

**Grading:** The final grade will be based on the following:

Homework problems	35%
In-class worksheets	16%
Policy debate	15%
Case study presentation	14%
Case study policy brief	20%

**Homework problems (HP):** There will be 9 short homework problems. They will be posted at the end of each class and will be due at the beginning of the next class. Solutions will be provided so that you can see where you went wrong. So I can post solutions promptly after each deadline, late submissions will not be accepted under *any* circumstance. On the other hand, the 2 lowest scored problems for each student will not count towards the final grade. Therefore, even if you skip 2 of the 9 homework problems, you can still achieve a perfect final score. Use this option wisely.

**In-class worksheets:** During each class, we will together complete a worksheet of exercises. All you need to do for a perfect score here is keep up with the lecture. These will also offer opportunities to earn extra credits towards the final grade. The worksheets are due at the beginning of the next class. Like the homework problems, the 2 lowest scored (of 10) worksheets will be dropped from the final grade.

**Policy debate:** Pairs of student groups will defend opposing views on a hypothetical controversial transportation policy using the economic concepts learnt in class.

**Case study (CS):** There is one final data project that involves a group presentation and a policy brief. Each group of students will evaluate a transportation policy/project that is either already in effect or in planning. Each student in the group will focus on a different dimension of the policy. The group will present their evaluation approach in a joint presentation during the 6th week. Individuals will submit separate policy briefs at the end of the course. Students will be evaluated on how well they incorporate concepts and data analysis techniques covered throughout the course.

## COURSE OUTLINE (TENTATIVE)

---

The tentative schedule of lectures and deadlines is as follows:

Day	Topics
Mon, Jan 10	Introduction, markets, supply and demand for transportation
Thu, Jan 13	<b>HP 1 due</b> , Market equilibrium, transport demand elasticity
Mon, Jan 17	<b>HP 2 due</b> , Marginal costs, transport markets under perfect competition
Thu, Jan 20	<b>HP 3 due</b> , Market failures and externalities
Mon, Jan 24	<b>HP 4 due</b> , Transport subsidies, regulation and ownership
Thu, Jan 27	<b>HP 5 due</b> , Pricing transportation services, congestion
Mon, Jan 31	<b>HP 6 due</b> , Accessibility, location choice and housing markets
Thu, Feb 03	<b>Policy debates</b>
Mon, Feb 07	<b>HP 7 due</b> , Accessibility, location choice and housing markets (in data)
Thu, Feb 10	<b>HP 8 due</b> , Choice modeling, revealed preferences in data
Mon, Feb 14	<b>HP 9 due</b> , Value of travel time, cost-benefit analysis
Thu, Feb 17	<b>CS presentations</b> , final day of class
Wed, Feb 23	<b>CS policy briefs due</b>

## COURSE POLICY

---

**Academic Integrity:** Students in this course will be expected to comply with the Aalto University Code of Academic Integrity.

**Disability Information:** If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify the instructor no later than the first week of the course period. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations.

**Classroom Recording:** To ensure the free and open discussion of ideas, students *may not* record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.