

# Transport Economics (SPT-E4050)

Prottoy A. Akbar

Period III, Spring 2023

## OVERVIEW

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Instructor	Prottoy A. Akbar (prottoy.akbar@aalto.fi)	TA	William Ogden (william.ogden@aalto.fi)
Lecture Times	Mon 10.15 - 12.45 Thu 9.15 - 11.00	Office Hours	Wed & Fri 12.00 - 13.00
Lecture Location	R3 - 255, Rakentajanaukio 4	Office Hour Location	V122 Fischer Black Ekonominaukio 1

**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 books 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

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

Homework problems	42%
In-class worksheets	16%
Policy debate	20%
Case study	22%

**Homework problems (HP):** There will be 8 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 lowest scored (of the 8) homework problems for each student will not count towards the final grade. Therefore, even if you skip one of the 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. The two lowest scored worksheets will be dropped from the final grade.

**Policy debates:** Pairs of student groups will defend opposing views on a hypothetical controversial transportation policy using the economic concepts learnt in class. Prior to the debate, each group will submit a policy brief on the position they are defending.

**Case study:** There is one final data project that involves a 2-3 page policy brief. Students will be evaluated on how well they incorporate concepts and analysis techniques covered throughout the course.

## COURSE OUTLINE (TENTATIVE)

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The tentative schedule of lectures and deadlines is as follows:

Day	Topics
Thu, Jan 12	Introduction, markets, supply and demand for transportation
Mon, Jan 16	<b>HP 1 due</b> , Market equilibrium, transport demand elasticity, competition
Thu, Jan 19	<b>HP 2 due</b> , Market failures and externalities
Mon, Jan 23	<b>HP 3 due</b> , Transport subsidies, regulation and ownership
Thu, Jan 26	<b>HP 4 due</b> , Pricing transportation services and congestion
Mon, Jan 30	<b>HP 5 due</b> , Accessibility, location choice and housing markets
Thu, Feb 02	<b>Policy debates</b>
Mon, Feb 06	<b>Policy debates</b>
Thu, Feb 09	<b>HP 6 due</b> , Choice modeling, revealed preferences in data
Mon, Feb 13	<b>HP 7 due</b> , Value of travel time, cost-benefit analysis
Thu, Feb 16	<b>HP 8 due</b> , Example case studies
Thu, Feb 23	<b>Case Study due</b>

## COURSE POLICY

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**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.