

Course Syllabus

FAG3186-Transport Policy (Doctoral Course)

Instructors

MS: Michele Simoni (Examiner, Course Responsible).

Description

A transport planner should be able to identify and evaluate relevant policy measures and strategies of interest. This course is geared toward providing an overview of methods used by transport planners for policy analysis. Policy appraisal can be applied to a wide range of transport applications involving different sectors (road, rail, public transport) and scales (urban, regional, and national). This course will focus on strategy formulation and methodology for policy evaluation, with a special emphasis on non-market evaluation, and issue related to uncertainty, equity, and sustainability.

Objectives

After the course, you should be able to:

- Identify relevant policy measures and strategies to address transport-oriented problems and discuss their effectiveness in relation to societal objectives
- Discuss the underlying principles for different appraisal frameworks
- Explain and apply the principles of cost-benefit analysis to make economic appraisals of transport improvement projects
- Account for advantages and limitations of traditional appraisal methods
- Account for methods for non-market valuation, and discuss their strengths and limitations
- Account for uncertainty in transport policy evaluations
- Use relevant equity measures to account for distributional impacts of different transport policies, and discuss their strengths and limitations
- Identify important barriers to implementation of transport policies in different contexts, and discuss means to address such barriers.
- Discuss the complexity of behavioral response towards implemented policy

This course revisits some concepts from microeconomics, behavioral economics, engineering, and statistics.

The following lectures will be taken in conjunction with the course “Transport Policy and Evaluation” (AH2301):

- Transport Costs & Benefits
- Transport Demand & Supply
- Equilibrium & Welfare
- CBA
- MCDA
- Uncertainty & Risk
- Accessibility & Equity

Resources

Readings

Lectures are designed mainly on selected chapters from the following books:

1. McCarthy, P. S. (2001). *Transportation economics: theory and practice: a case study approach*. Wiley-Blackwell.
2. Varian, Hal R. *Intermediate microeconomics with calculus: a modern approach*. WW Norton & Company, 2014.
3. Small, K. A., Verhoef, E. T., & Lindsey, R. (2007). *The economics of urban transportation*. Routledge.

Additional literature for more specialized topics will be communicated at each lecture and made available on Canvas.

Canvas Course Web Site

Course materials will generally be made available via this Canvas system. This is where the most up-to-date information about class sessions, assignments, and requirements will be posted. To access Canvas, you will need a KTH login and password, and you will need to be officially registered for the course. If you have problems with the Canvas system, please contact the Canvas administrator, via Canvas help/support page.

Grading

Final course grades (Pass/Fail) are determined by performance on the exam and participation in two seminars.

Seminars

The seminars entail an active discussion on a selected relevant topic. The first seminar will center on social welfare evaluation, considering travel behavior. The second seminar will critically examine traditional appraisal techniques and explore selected methods in sensitivity analysis. To facilitate an active discussion, participants will be assigned journal papers and selected chapters from academic books relevant to the topics in advance. This will allow participants to investigate the issues in depth and form informed opinions. Participants will also be required to produce a brief reflection on the assigned papers as part of the seminar activity.

Exam

A written exam will be scheduled at the end of the course. The exam will cover the concepts addressed in both lectures and seminars.

Plagiarism

Reporting laboratory exercises and term projects would involve policy document readings and report writings. Therefore, it is very important that the student must understand and comply with KTH's policy on plagiarism.

The student must provide proper attributions to any references that he has used. It is forbidden to 'submit someone else's work as one's own'. This includes copying of text, problem solutions, computer programs, drawings/diagrams, and pictures without specifying the source. Copying other students' work without acknowledgement and summarizing/translating a text without proper attribution to original source is also defined as plagiarism. More detailed explanation of the policy can be found at: <https://www.kth.se/en/student/studier/rattigheter-och-skyldigheter/disciplinaren-1.324323>