AH2311 Transport and Travel Surveys 3.0 credits

Trafik- och resvanorsundersökningar

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for AH2311 valid from Autumn 2014

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

For admitted students to the Master of Science in Civil Engineering and Urban Management (CSAMH) or the Master of Science in Transport and Geoinformation Technology (TTGTM), there are no additional requirements.

For other students:

- A completed bachelor's degree in civil engineering, urban planning, geomatics, geography, engineering physics, computer science, statistics, economics, and/or mathematics, including at least 6 university credits (hp) in each of the following or their equivalents: Programming, Linear Algebra, Calculus in One Variable, and Probability & Statistics; and

- English language proficiency equivalent to (the Swedish upper secondary school) English course B/6.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Students will be able to:

- Choose the appropriate plan for collecting accident data
- Design the overall layout and specific questions for a travel diary survey
- Pilot a travel survey and revise it based on the results of the pilot
- Design and implement a stated preference survey using hypothetical questions
- Perform simple statistical analysis to examine key questions in the collected data

Course contents

The course is organized around three main cases for collecting and analyzing transport data:

- Traffic safety analysis
- Revealed preference data from household travel diaries
- Stated preference data from questionnaires

Disposition

Each of the three main case studies is treated using a combination of lectures, readings, and a short laboratory project.

Course literature

Möjlig litteratur kan inkludera:

- J.de D. Ortúzar and L.G. Willumsen (2002), Modelling Transport.
- S.Washington, M Karlaftis, F.Mannering (2003), Statistical and Econometric Methods for Transportation Data Analysis.
- A selection of research articles.

Examination

• LAB1 - Laboratory Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

- LAB1 - Laboratory Assignment, 3.0 credits, grade scale: A, B, C, D, E, FX, F

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.