



AH1023 Urban and Traffic Planning, Methods and Applications

7.5 credits

Stads- och trafikplanering, metoder och tillämpningar

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

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

Establishment

Course syllabus for AH1023 valid from Spring 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed and documented upper secondary education including documented proficiency in Swedish B.

Language of instruction

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

Intended learning outcomes

- Understand the multimodal aspects of transportation systems
- Identify main challenges and issues in urban traffic
- Understand basic design aspects of transport systems
- Describe main approaches to transportation planning
- Identify important measures of mobility and accessibility
- Interpret results from traffic planning models and tools

Course contents

- Elements of the urban transportation system and their role
- Public transport systems role and operations
- Demand and supply of urban traffic systems
- Urban transportation planning methods and models
- Data for traffic and transportation planning and their analysis; the role of GIS
- Demand management

Course literature

§ Vägar och gators utformning (VGU)

§ Trafik för attraktivstad (TRAST)

§ Traffic planning manuals and documents

§ Handouts

§ Khisty and Lall, **Transportation Engineering: An Introduction**, 3rd edition, 2003

§ Mannering, Kilareki, and Washburn, **Principles of Highway Engineering and Traffic Analysis**, John Wiley and Sons, Inc., 2005

§ Meyer and Miller, **Urban Transportation Planning**, McGraw Hill, 2001

§ O'Flaherty, C.A. (ed.) **Transport Planning and Traffic Engineering**, Arnold, London, 1997.

Equipment

N/A

Examination

- PRO1 - Project, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 4.0 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.

- Mandatory written exam with grading scale A-F, 4.0
- Mandatory assignments and project with grading scale, A-F, 3.5

Other requirements for final grade

Written examination (TEN; 4,5 cr) and project work (ÖVN; 3 cr).

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.