



FAG3187 Sustainable Mobility

3.0 credits

Hållbar mobilitet

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

The course syllabus is valid from Autumn 2023 according to the Head of school decision: A-2023-2487, 3.2.2 Decision date: 2023-10-23

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Admission to relevant doctoral program: Approved courses of at least 60 ECT in the subject areas of transportation systems, civil engineering, urban planning, economics, computer science, physics, applied mathematics, or other subjects deemed directly relevant.

Proficiency in English equivalent to English 6

Language of instruction

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

Intended learning outcomes

After the course the students should be able to

- Critically discuss the opportunities and challenges of ensuring sustainability and equity in transport planning.
- Understand and reflect on the role (or the lack thereof) of gender equality, diversity and equity in transport planning.
- Describe alternative transport futures to meet sustainability goals.
- Apply the tools learned in the course to evaluate a transport strategy or scenario.
- Reflect on their own individual research with the perspective of transport sustainability or transition towards sustainability.

Course contents

The course is built on the fundamental concepts of sustainability and equity applied in transport planning. It will encourage norm critical thinking of traditional and contemporary approaches to mobility with the lens of sustainability and equity. The changing socio-technological landscape will be considered. Evaluation of novel transport solutions and strategies will be discussed using different tools and methods (e.g. scenario analysis, strategy evaluation, backcasting).

The course will be delivered in a series of lectures on sustainable mobility concepts, theories, methodologies and applications. Students will apply those knowledge in their assignments and present their findings in seminars where peer discussions will be facilitated.

Examination

- INL1 - Hand-in assignment, 1.5 credits, grading scale: P, F
- INL2 - Hand-in assignment, 1.5 credits, grading scale: P, 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.

The examiner may, based on a recommendation from KTH's coordinator of support for students with disabilities, decide on any adapted examination for students with documented, permanent disabilities.

The examiner may allow an alternative form of examination for re-examination of individual students.

Other requirements for final grade

Participation at more than 75% of seminars is mandatory. One seminar can be replaced with a supplementary written assignment.

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.