



COURSE SYLLABUS

Hållbara transportsystem Sustainable Transport Systems 7.5 credits (7,5 högskolepoäng)

Course code: SL2551

Main field of study: Strategic Leadership towards Sustainability

Disciplinary domain: Technology

Education level: Second cycle

Specialization: AIN - Second cycle, has only first cycle course/s as entry requirements

Subject area: Industrial Engineering and Management

Language of instruction: English

Applies from: 2021-01-18

Approved: 2020-10-01

1. Decision

This course is established by Dean 2020-04-23. The course syllabus is approved by Head of Department of Strategic Sustainable Development 2020-10-01 and applies from 2021-01-18.

2. Entry requirements

Taken a university education of at least 120 credits. Taken a basic course in Strategic Sustainable Development of at least 6 credits. English 6.

3. Objective and content

3.1 Objective

The course aims to develop the student's knowledge and understanding of current transport systems, their sustainability consequences, and how they can be transformed strategically to sustainability.

3.2 Content

A variety of topics that affects strategic sustainable development of transport systems will be covered. This includes sustainability effects of different transport modes and their life cycles for both goods and people, and the planning, management and integration of transport modes to support strategic sustainable development of the society at large.

4. Learning outcomes

The following learning outcomes are examined in the course:

4.1 Knowledge and understanding

On completion of the course, the student will be able to:

- Describe in an overall way global sustainability challenges, policies and objectives that affect the development potential of the transport sector.
- Describe current and possible future passenger and goods transport modes and their life cycles, and how they relate to strategic sustainable development.
- Describe current and possible future transport planning as a part of spatial planning for urban and rural development, transport management/governance, integration of different transport modes, and how they relate to strategic sustainable development.

4.2 Competence and skills

On completion of the course, the student will be able to:

- Conduct an overall analysis of sustainability effects for different transport solutions, plans, policies and practices.
- Together with transport stakeholders, make overall plans for strategic sustainable development of transport systems.

4.3 Judgement and approach

On completion of the course, the student will be able to:

- Argue in general terms about advantages and disadvantages of different solutions for strategic sustainable development of transport systems.

- Discuss how different major transport stakeholders and societal sectors can contribute to strategic sustainable development of the transport system.

5. Learning activities

The teaching takes place on distance through lectures, interactive seminars, and supervision. Projects supervised by teachers give students opportunity to apply theoretical knowledge in practice, as well as practicing on presentation, opposition and report writing.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
2105	Oral examination	1 credits	GU
2115	Presentation	2 credits	AF
2125	Opposition	0.5 credits	GU
2135	Written report	4 credits	AF

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.

The final grade is generated by weighting the separate grades from examination modules graded with A-F.

The course-PM for each course revision should include the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

An examiner can, after consulting the Disability Advisor at BTH, decide on a customized examination form for a student with a long-term disability to be provided with an examination equivalent to one given to a student who is not disabled.

7. Course evaluation

The course evaluation should be carried out in line with BTH:s course evaluation template and process.

8. Restrictions regarding degree

The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

9. Course literature and other materials of instruction

Schiller, P.L., Kenworthy, J.R., 2018. An Introduction to Sustainable Transportation: Policy, Planning and Implementation, 2nd ed. ISBN 9781315644486.

Supplementary materials are provided.