

Course syllabus

Transport och samhälle Transports and Society

VTVA50, 9 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED V

Date of Decision: 2023-03-21

General Information

Compulsory for: IBYI1, IBYV1

Language of instruction: The course will be given in Swedish

Aim

The student will gain fundamental knowledge of physical planning in the society focusing on the infrastructure. The student will also gain knowledge of the requirements of the society and the customers as well as the organization of the transport business and the players thereon. The "afu" (Workplace situated education) is aimed at connecting the course to applied aspects in the railroad and road/traffic areas respectively.

Learning outcomes

*Knowledge and understanding*For a passing grade the student must

- understand and be able to present the physical planning process on different levels
- have a basic knowledge of the relevant legislation and the balance between various interests
- have basic knowledge of the different professional players in infrastructure projects
- be able to describe the transport policy objectives on a Swedish and a European level
- have basic knowledge of the safety and environmental effects of traffic
- be able to describe the transport demands and needs of travellers and transport buyers

Competences and skills

For a passing grade the student must

- be able to present the knowledge acquired from lectures, performed field studies and literature studies in writing as well as orally
- be able to assemble information from different sources, compare and make independent conclusions

Contents

LP1 – Learning period 1

The course lasts for two learning periods. In the course's first part, the transportation sector and the society's requirements of the transportation sector will be studied. Focus lies on physical planning and how this is connected to the need for transport. The planning process on a national, regional and municipal level will be studied. In addition the regulations, the players, and the interaction between them will also be studied. The organization the transport authority is presented focusing on overland transport. The course content is applied on one or several actual planning projects. The knowledge acquired in LP1 will be presented in a case study essay that is written and presented as a teamwork. Each group will also oppose on another group's essay and presentation. Special documents will be handed out as aids for the contents of the essay.

LP2 – Learning period 2

In the second learning period the traffic's origins and driving forces, the conditions and the demand for different kinds of transport will be studied. Access, safety, environment and health aspects will be studied in connection to the political transport objectives. Conditions for sustainable transports will be studied. The knowledge acquired in LP2 will be presented in a case study essay that is written and presented as a teamwork. Each group will also oppose on another group's essay and presentation. Special documents will be handed out as aids for the contents of the essay

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: For passing grade the following requirements should be fulfilled: active participation in discussions and reviews, validated exercises, validated reports and written exam. In the course, a mandatory study visit and mandatory experience are also included; the latter is either of the courses "To work on the road" and "Basic course in walking on the railway".

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts

Code: 0112. Name: Transports and Society.

Credits: 9. **Grading scale:** TH. **Assessment:** Betyg TH(U,3,4,5), weighted together with written exam results **Contents:** Written report and oral presentation, Lp1 Written report and oral presentation, Lp2

Code: 0212. Name: Work Related Training.

Credits: 0. Grading scale: UG.

Admission

The number of participants is limited to: No

The course overlaps following course/s: AAK630, VTT612, VTVA15, VTVA40

Reading list

- Christer Hydén (red.): Trafiken i den hållbara staden. Studentlitteratur, 2008, ISBN: 9789144053011. 498 pages.
- Reference literature: a web based course library is available.

Contact and other information

Examinator: Helena Svensson, helena.svensson@tft.lth.se

Course homepage: http://www.tft.lth.se/utbildning/grundutbildning/

Further information: Any travel expences related to AFU/mandatory field trips are

paid for by the student.