



*Course syllabus*

# Samhällsekonomi Economics

**VVBF10, 7,5 credits, G2 (First Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED V

**Date of Decision:** 2023-03-21

## General Information

**Main field:** Technology.

**Compulsory for:** IBYI2, IBYV2

**Elective Compulsory for:** V3

**Language of instruction:** The course will be given in Swedish

## Aim

The aim of the course is to deepen the student's knowledge on economics on the national level. Within the area of public economics, great importance is attached to the mechanism of the determination of prices, regulated markets, and external effects like environmental effects. The aim is furthermore to increase the understanding of how the public economy works as a whole but also how various evaluation methods can be used to find the most efficient investments and measures. Another aim is to increase the knowledge on various financial and organisational solutions of an investment like tendering and contract arrangements.

The teaching form consists of lectures, exercises and a field study with related group assignment. Exercises are carried out individually under the teacher's guide. The exercises are carried out in groups of about 30 students. The field study is conducted in groups with teacher-led feedback on execution and content of the report.

## Learning outcomes

*Knowledge and understanding*

For a passing grade the student must

- be able to define, and thoroughly describe keywords like economics and business economics, market economy, planned economy, mixed economy, market failures and regulated markets.
- be able to analyse and describe how various measures affect the market
- be able to explain how effects not having a direct monetary value, can be valued
- be able to formulate goals and conflicts between goals of the society

#### *Competences and skills*

For a passing grade the student must

- be able to evaluate a measure or an investment using various evaluation methods
- be able to apply, execute, and use cost benefit analysis
- be able to identify and assess the effects of a measure/investment and at the same time examine and test the valuation and its fairness.
- be able to discuss various financial solutions
- able to design and implement an evaluation plan for an action or investment

## Contents

The course is divided into three blocks:

- Basic theory and models of economics. Definitions and concepts
- Prioritisation and evaluation methods. Price mechanisms and valuations of effects.
- Cost benefit analysis - application

The base of the first part constitutes of economic theories and models. The student will learn: how various markets works, e.g. monopoly, planned economy, market economy, mixed economy; how the prices are put on various markets; how the sensitivity for price changes varies and how this in turn affect our financial means of control; how demand and supply is determined; why certain markets are regulated; the definition of external effects and how we can effect them.

In the second block, various prioritising and evaluation models are discussed.

Furthermore, within this block various methods of valuation are discussed. Examples of practical application of evaluation methods are given from various areas like the environmental-, transport- and health care area as well as the industry.

The third block focus on the cost benefit analysis method and its application within the transport sector. The student will learn how to execute and apply a cost benefit analysis. Other issues discussed are e.g. the use of discount rates and the implication on long-term environmental effects, and advantages/disadvantages with the cost benefit analysis. This block also discusses various models of finance.

## Examination details

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

**Assessment:** Students are examined individually and in groups. Group examination is based on written report from field studies and group discussions. Individual exams consist of a written exam. To pass the course requires approved assignments, report from field studies and group work, active participation in and attendance at the presentation of field study and the related group assignment, pass the exam.

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.

## Admission

**The number of participants is limited to:** No

**The course overlaps following course/s:** VVB061

## Reading list

- Trafikverket: Samhällsekonomiska principer och kalkylvärden för transportsektorn, ASEK 5. 2012.
- SIKA Rapport 2008:9: ABC i CBA. 2008.
- Frank, Robert H: Microeconomics and behavior. McGraw-Hill Higher Education, 2010, ISBN: 9780070166745.
- Utdrag ur rapporter och handledningar.

## Contact and other information

**Course coordinator:** Lena Hiselius, [lena.hiselius@tft.lth.se](mailto:lena.hiselius@tft.lth.se)

**Examinator:** Lena Hiselius, [lena.hiselius@tft.lth.se](mailto:lena.hiselius@tft.lth.se)

**Teacher:** Jean Ryan, [jean.ryan@tft.lth.se](mailto:jean.ryan@tft.lth.se)

**Course homepage:** <http://www.tft.lth.se>

**Further information:** The course is offered in Lund.