



# AG1812 Environmental Economics 7.5 credits

## Miljöekonomi

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 AG1812 valid from Spring 2022 (decision A-2021-1928). Decision date: 2021-10-15.

## Decision to discontinue this course

The course will be completed at the end of Spring 2024 according to decision: A-2021-1928. Decision date: 2021-10-15. The course is given for the last time Spring 2022. The last opportunity for examination in the course is given Spring 2024. The examination in AG1812 of learning objectives 1-4, and 8-9, is replaced during the transition period by individual assignments and group assignments via the course AL1357 Environmental Economics, which corresponds to the previous project work, exams and seminars, and corresponds to the same higher education credits. Examination of learning objectives 5-7 is examined via individual submission and corresponds to the same higher education credits. Detailed information can be read under the transitional provisions below.

## Grading scale

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

## Education cycle

First cycle

# Main field of study

Technology

## Specific prerequisites

## 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 student should be able to:

1. explain the economic theory that is used to analyse natural resource economic problems, and be able to apply this theory.
2. explain the need for policy instruments in different resource economic areas, describe why these measures can contribute to a more sustainable development, and be able to apply the theory on policy instruments.
3. explain the relevant empirical methods used to value non-market priced amenities, apply valuation theory, as well as be able to problematize about the role of different valuation methods in decision making.
4. explain and apply cost-benefit analysis (CBA).
5. perform and interpret calculations as basis for financial decisions in companies
6. describe how financial data are recorded, presented, and interpreted in companies
7. describe how a company's operations are financed
8. explain how companies work with sustainable development, what opportunities for innovation and new business opportunities this creates, and to analyze and evaluate companies' sustainability work.
9. individually and in group report and present findings from the course in written and oral form, and as a discussion opponent.

## Course contents

The overall aim of the course is to provide you with a theoretical and methodological toolbox for evaluating common environmental and natural resource economics issues, as well as to provide you with knowledge about business economics and sustainability work in companies.

The course is composed of three independent main parts; one larger and two smaller. The larger part consists of environmental and resource economics, and the smaller parts of business economics and environmentally driven business development, respectively. The common ground is economic thinking from different perspectives, but the three parts are not based on each other.

The first part, Business Administration, is focused on the company as an important part of the economic fabric of society, more specifically it is about product costing, bookkeeping, accounting, and corporate finance. The focus is on explaining basic concepts of business administration, on understanding how financial management in companies works, how financial accounting can be used and interpreted in decision-making, and on understanding the basic principles of bookkeeping, accounting, and financing as well as how a company's annual report can be compiled and interpreted.

The second part, environmental and natural resource economics, focuses studies on the economic theory and the theoretical and practical tools used to explain and solve environmental problems in society within the subject area of environmental economics. An important starting point here is to address the dilemma within environmental economics that environmental benefits and environmental costs are often valued to zero when evaluating policy measures or business projects. We focus on methods for making such values visible. This part of the course also contains studies of cost-benefit analysis (CBA), a method for evaluating the economic consequences of policy measures and projects. CBA helps us to analyze and discuss issues regarding, among other things, distribution aspects and goal conflicts. Finally, we study how policy instruments can be used to achieve a more sustainable and efficient use of natural resources.

The third part focusses on sustainability related work in companies and contains studies of definitions, frameworks and tools for sustainable business, as well as concrete examples of business models, and sustainable business in practice. In a group assignment, you will utilise your knowledge by analysing selected companies.

## Examination

- INL2 - Written and oral presentation, 1.5 credits, grading scale: P, F
- TEN2 - Examination, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN2 - Exercises, 1.5 credits, grading scale: P, F
- ÖVN3 - Exercises, 2.0 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.

## Transitional regulations

The last examination opportunity is given VT2024.

Re-examination in order to raise a passed grade is not allowed.

The module TEN2 (AG1812), learning objectives 1-3, is examined via TEN (AL1357). Please note that the course literature may change between courses.

The module INL2 (AG1812), learning objectives 1-4, 9, is examined via INL (AL1357). Please note that the course literature may change between courses.

The module ÖVN2 (AG1812), is examined via two approved seminars from ÖVN (AL1357), a seminar that corresponds to the examination of learning objectives 1-4, 9, (AG1812) and a seminar that examines learning objectives 8-9 (AG1812). If the student has already passed at one of the two seminars under ÖVN2 (AG1812), the student only needs to be examined at the remaining seminar. Please note that the course literature may change between courses.

The module ÖVN3 (AG1812), learning objectives 5-7, is examined via an individual assignment. Please note that the course literature may change between courses.

## **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.