

SYLLABUS

Advanced Environmental and Natural Resource Economics 7.5 credits N7008N

Miljö- och naturresursekonomi

Course syllabus admitted: Autumn 2015 Sp 1 - Autumn 2015 Sp 2

**DECISION DATE
2015-02-16**

Advanced Environmental and Natural Resource Economics 7.5 credits N7008N

Miljö- och naturresursekonomi

Second cycle, N7008N

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G VG	Nationalekonomi	Economics

Entry requirements

Bachelors degree or equivalent academic qualifications (180 ECTS, three year full time studies) with at least 60 ECTS in economics including thesis work corresponding to 15 ECTS.

Selection

The selection is based on 30-285 credits

Examiner

Patrik Söderholm

Course Aim

After completing the course the student should be able to use the theoretical tools presented at the course to: a) Describe and critically examine the different schools of thought regarding both the sustainable development problem ethical views on the economy – environment interdependence. b) Use neoclassical economic theories to identify and analyze both graphically and mathematical the presence of different market failures that give rise to an inefficient use of environmental resources. c) Using both graphical and mathematical tools to analyze the impacts and the efficiency of different environmental policy instruments such as emissions trading, environmental taxes and emission limits. d) Explain and critically evaluate the basics of methods designed to value environmental impacts and changes in economic terms as well as the limitations of such methods, and use this knowledge to conduct simple economic valuation studies. e) Using both graphical and mathematical tools analyze and discuss the meaning of optimal use of different natural resources – renewable as well as non-renewable – and the causes of deviations from these criterias. Furthermore, the student should be able to suggest and evaluate the impact of different policy measures designed to promote an efficient use of natural resources. f) In written form as well as orally summarize, discuss and critically evaluate different works of science within the field g) In writing perform a review of scientific publications relevant to a current research topic.

Contents

- The sustainability problem
- Ethics, economics and the environment
- Welfare economics and market failures
- Pollution control: targets
- Pollution control: instruments
- International environmental problems
- Valuation of the environment in theory and practice
- Efficient and optimal use of non-renewable natural resources
- Efficient and optimal use of renewable natural resources
- Policy instruments and natural resource extraction

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and seminars. The course is if necessary given English.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The examination of the course consist of: a) a final written exam (4,5 ECTS), b) oral examination on environmental valuation methods (1,5 ECTS) and c) a written report on the use of different types of environmental policy instruments (1,5 ECTS). The final written exam primarily tests goals a)-e) above while the remaining two examinations primarily test goal f). All tests are graded U, G or VG. For VG at the entire course the student must get VG at the final exam as well as on one of the other two tests.

Remarks

Students must register for the courses themselves, or contact ETKS educational administration eduetks@ltu.se, not later than five days after the quarter commences. Failure to do so can result in the place being lost. This rule also applies to students with a guaranteed place.

Note that this course can not be included in any degree in combination with N0024N Environmental Economics I.

Overlap

The course N7008N is equal to N7011N, N0024N

Literature. Valid from Autumn 2012 Sp 1

Perman, R et al. (2011). Natural Resource and Environmental Economics, Fourth Edition, Addison Wesley.
Journal articles may be added to the list.

Course offered by

Department of Business Administration, Technology and Social Sciences

Items/credits

Number	Type	Credits	Grade
0001	Written exam	4.5	U G VG
0004	Oral examination: environmental valuation	1.5	U G VG
0005	Written report: environmental policy instruments	1.5	U G VG

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Director of Undergraduate Studies Bo Jonsson, Department of Business Administration, Technology and Social Sciences 2015-02-16

Syllabus established

by Director of Undergraduate Studies Bo Jonsson Department of Business Administration, Technology and Social Sciences 2011-02-07