# Environmental and Resource Use Challenges

Single subject and programme course

7.5 credits

Environmental and Resource Use Challenges

746A61

Valid from:

**Determined by**
The Quality Board at the Faculty of Arts and Sciences

**Date determined**
2010-09-24

## Main field of study
Environmental Science

## Course level
Second cycle

## Advancement level
A1X

## Course offered for
- Master´s Programme in Science for Sustainable Development

## Entry requirements
Applicants must hold a bachelor's degree/kandidatexamen (equivalent for example a professional degree) of at least 180 ECTS credits, including a 15 ECTS credit degree paper or equivalent. Relevant background is studies within natural science, social science, health science, humanities or engineering that relate to the environmental, social or economic aspects of sustainable development. Documented knowledge of English equivalent to Engelska B/Engelska 6.

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## Intended learning outcomes
On completion of the course, the student should be able to:
- account for dynamics, change and challenges based on knowledge and understanding of environmental systems contextualized in history and in future scenarios to
- demonstrate knowledge and understanding of key perspectives in international negotiations regarding water and energy-related issues;
- show how environmental challenges are linked to consumption patterns, resource use and demographic change;
- show knowledge and understanding of key technological developments regarded as possible solutions to certain environmental challenges, but also how technology may be identified as the source of environmental problems;
- communicate environmental issues orally and in text.

## Course content

The course provides a basic understanding of environmental changes and challenges induced by energy consumption, industrial processes as well as water and land use. It will also illustrate how knowledge of such changes is formed through advanced modelling and construction of scenarios. The course will provide an elaborated understanding of the driving forces behind, and potential solutions to, environmental changes. Through the multidisciplinary approach, the linkages between the nature and the society will be focused upon from both a natural sciences and social sciences perspective.

## Teaching and working methods

Lectures will provide a deeper understanding of topics covered by the course literature and anchor the knowledge base of the subject. Knowledge is further reinforced during seminars and text discussions. Furthermore, laboratory workshops will facilitate an understanding of the role of modelling in environmental science and policy. Homework and independent study are a necessary complement to the course.
Language of tuition: English

## Examination

The course is examined through active participation in seminars and through continuous written individual assignments. Detailed information about the examination can be found in the course's study guide.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

ECTS, EC

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men´s and women´s experience and knowledge is made visible and developed.

## Department

Institutionen för Tema