Environmental and Resource Use Challenges

Naturresurser – användningsområde och utmaningar
7.5 credits

Single subject and programme course

746A61

Valid from: 2026 Autumn semester

Determined by	**Main field of study**	
The Quality Board at the Faculty of Arts and Sciences	Environmental Science	
Date determined	**Course level**	**Progressive specialisation**
2010-09-24	Second cycle	A1N
Revised by	**Disciplinary domain**	
Chairman of the Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Natural sciences	
Revision date	**Subject group**	
2024-12-09; 2025-08-12; 2025-12-17	Environmental Science	
Offered first time	**Offered for the last time**	
Autumn semester 2010		
Department	**Replaced by**	
Institutionen för Tema		

Course offered for

- Master's Programme in Science for Sustainable Development

Entry requirements

- 150 credits of which 90 credits with progressive deepening within one main field of study.
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6 or Engelska nivå 2).
  Exemption from Swedish

Intended learning outcomes

On completion of the course, the student must, at an advanced level, be able to:

- describe various environmental resources, their areas of use, and challenges from a sustainability perspective
- discuss the connections between different aspects of sustainable resource management including relationships on consumption patterns and demographical changes
- apply basic analyses within Geographic Information Systems (GIS)
- provide oral feedback on an academic text
- communicate knowledge orally and in writing within the field of sustainable resource management

Course content

The course addresses resource use and challenges for sustainable resource management. Connections between different resources, as well as their impact on and by consumption and production patterns, are discussed from various perspectives, such as development over time and demographical changes. Examples of natural resources include land, water, minerals, and energy. These are related to topics such as food security. The course includes methodological parts in both Geographic Information Systems (GIS) as well as academic writing and popular science presentation.

Teaching and working methods

Teaching consists of lectures, seminars, study visits, computer laboration and group work.

In addition, students are expected to engage in self-study.

Examination

The course is examined through:

- Active participation in seminars and laboratory sessions, grading scale: EC (P/F)
- Oral group presentation, grading scale: EC (P/F)
- Individual written examination, grading scale: EC

To achieve a passing grade (E) as the final grade, a passing mark (Pass) is required for all assessment components, as well as at least an E on the individual written examination. Higher grades are based on the individual written examination.

Detailed information can be found in the study guide.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

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 conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly, or as a whole, in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.