



Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Concepts in Sustainable Land Use

Course Code	AB_1287
Credits	6
Period	P3
Course Level	200
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. ir. C.J.E. Schulp
Examiner	dr. ir. C.J.E. Schulp
Teaching Staff	dr. ir. C.J.E. Schulp, dr. ir. J. van Vliet
Teaching method(s)	Excursion, Lecture, Seminar

Course Objective

The aim of this course is to provide students with the fundamental ideas and concepts in the field of sustainable land use, and with analytical tools needed to understand and analyse how sustainable land use contributes to dealing with the global biodiversity and climate crises.

After completing this course, the student is able to:

- Explain how the drivers of current global sustainability challenges translate into pressures on land, ecosystems and other resources;
- Quantitatively and qualitatively evaluate land-based solutions for these sustainability challenges in terms of uptake, effectiveness, and externalities;
- Know the major scientific theories and concepts related to sustainable land use and apply them to tangible cases.

Course Content

Concepts in Sustainable Land Use studies how interactions between human actions and the abiotic environment result in sustainability challenges and can inform solutions to those challenges. The course addresses how human actions influence land systems and how these cascade into impacts on water resources, biodiversity, and climate. The course also goes into solutions to these challenges. Which actions can we take to moderate negative effects of land use? How accepted and effective are such measures? Lectures and tutorials provide a background on drivers, pressures, state changes, impacts and responses to environmental change by taking stock of different disciplines, including economy, ecology, geography, and land science. Students will be introduced in the theoretical foundation behind sustainable land use, will encounter the latest scientific insights in the field and will learn practical analysis skills.

Additional Information Teaching Methods

The course consists of 10 modules, that each deal with concepts related to sustainable land use, such as or a potential solution to environmental impacts. Each module consists of 1. a preparation that involves reading a scientific paper accompanied by 2. a brief reading assignment, 3. an introductory lecture, 4. and a tutorial in which you apply the introduced concepts and solutions in a hands-on practical assignment.

Method of Assessment

The course is graded through a written exam that consists of multiple choice, short answer and a few essay questions (50%) and the reading assignments and practical assignments (50%).

Entry Requirements

This course follows up on Human-Environment Systems and Sustainability Transformations (HESST; AB_1268), but can be followed without that pre knowledge. Basic Microsoft Excel skills are required.

Literature

Mandatory literature is a selection of scientific literature. Each module builds on a short scientific article, or selected parts of longer articles. All key concepts are summarized in a glossary on Canvas, which is also mandatory literature.

Additional Information Target Audience

BSc Aarde, Economie en Duurzaamheid
Minor Earth and Climate
Minor Earth Surface – track earth sciences