



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](#).

Global Sustainability Analysis

Course Code	AB_1289
Credits	6
Period	P5
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. ir. J. van Vliet
Examiner	dr. ir. J. van Vliet
Teaching Staff	prof. dr. S. Poelhekke, dr. ir. J. van Vliet
Teaching method(s)	Lecture, Study Group

Course Objective

The course provides students with a multi-disciplinary view of the Sustainable Development Goals (SDGs) in the context of topics that are relevant to Earth, Economics and Sustainability in the broadest sense. The objectives of this course:

- To understand the international dimensions of sustainability challenges.
- To know and understand the operation of international conventions and policies, including the UN Agenda 2030, but also for example the IPCC and Sendai Disaster Framework.
- To evaluate Sustainable Development Goals, as well as the trade-offs and synergies that potentially exist between multiple goals, and the context dependencies of these goals.
- To learn to communicate effectively on sustainability, for example through debates and movies.

Course Content

The United Nations Agenda 2030's SDGs constitute an ambitious roadmap of 17 goals and 169 targets aimed at reducing global inequities, ending unsustainable consumption patterns, facilitating sustained and inclusive economic growth, social development, and ensuring a sustainable future for all humanity. The SDGs mark an important shift in the way nature and human relations are understood and addressed. For example, the SDGs promote the idea of coupled human-nature systems in which poverty reduction and health are seen as intrinsically intertwined, and their transformative potential can materialize if the relation between poverty and environmental degradation is made explicit.

Meeting the SDG targets requires collaboration among scientists involved in monitoring, protecting, managing, assessing, and restoring the natural environment, including earth scientists, environmental scientists, and economists. Interdisciplinary approaches are thus needed to meet the SDGs in order to manage and allocate natural resources taking into account the links between natural and human systems. This implies their engagement in the SDGs across multiple disciplines (e.g. engineering, ecology, geography, urban studies, psychology) and sectors (e.g. academia, industry, government, and civil society) to ensure an effective translation of knowledge into tools to inform policy and practice.

This course is aimed at increasing awareness of environmental issues and the links between SDGs, earth science, and economics to achieve a better and more sustainable future for all. The course will allow students to get a deeper understanding of timely and important issues such as environmental sustainability and apply these concepts in real-life examples in preparation for their professional careers. Understanding the normative aspect of SDGs, and trade-offs (and Synergies) involved is an explicit part of this. After the successful completion of the course, the students will be able to communicate the importance of considering earth-system context, boundaries, and feedback to policymakers and stakeholders charged when considering different SDGs. The acquired knowledge will then prepare the students that will decide to either specialize by taking a master's degree or to work as an advisor at a research institute, water board, ministry or NGO, or a company that works on sustainable solutions.

Additional Information Teaching Methods

The course is structured in 4 theses, each of which takes a week. First, we will explore the SDGs and their policy context. Subsequently, we will analyze trade-offs, synergies, and context dependency, by lectures and guest lectures on related topics. In addition, we will use a range of activities, including serious games, debates, and

others, to actively engage students and enhances critical and scientific thinking. Different experts will be invited to show links between SDGs (e.g. social sustainability, urban development, and health), geoscience (e.g. water-related issues, climate, and geology and land use), and economics (e.g. energy transition, economic growth, etc.). Lectures will be on-campus only.

Students are expected to attend classes as interaction and discussion is an important aspect of this course. Attending the debate sessions is mandatory to pass the course. This course grants 6 credits, with an expected workload of about 157h hours, in accordance with the standard workload of BSc courses at VU

Method of Assessment

The course assessment is evaluated by means of an exam and graded assignments. The exam covers the materials discussed in lectures and the associated literature and accounts for 50% of the score. The group assignments (including a debate and a video-assignment) relate to the SDGs in general account for another 50%. The assignments will be introduced and explained during the lectures and on canvas. The grades will be combined to form the final course grade. a minimum score of 50% for the written exam is required to pass the course.

Entry Requirements

In this course we expect a basic understanding of environmental challenges and economic processes related to the SDGs, covering, for example, climate change, economics, and land use and land cover change. Addition understanding of ethical and normative aspects is desirable. For students in the Bachelor Earth, Economics and Sustainability, this would relate to the following courses:

- Global Change
- Human Environment Systems and Sustainability Transformations
- Concepts in Sustainable Land Use
- Wijsbegeerte voor AED

Literature

Readings for each lecture are specified on the Canvas page. They consist of book chapters and papers related to specific lectures, and are subdivided into "Mandatory reading (exam material), and optional reading (providing more background and insights, but not strictly exam material).

Additional Information Target Audience

3rd year Earth, Economy and Sustainability BSc students. since the course is also open for foreign students, it will be taught in English.