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.

Grand Challenges for Sustainability

Course Code	E_MFS_GCS
Credits	6
Period	P1
Course Level	300
Language Of Tuition	English
Faculty	School of Business and Economics
Course Coordinator	dr. ir. J.H. Ansink
Examiner	dr. ir. J.H. Ansink
Teaching Staff	dr. ir. J.H. Ansink, C. Leisher, prof. dr. P.J.H. van Beukering
Teaching method(s)	Lecture, Study Group

Course Objective

The objective of this course is to characterize a path toward sustainable development and to identify the Grand Challenges the world faces in making the transition from the business-as-usual path to the sustainable development path.

ACADEMIC SKILLS / KNOWLEDGE

- The biophysics behind global environmental problems such as climate change and biodiversity loss;
- The importance of the 17 Sustainable Development Goals for achieving sustainable development;
- The drivers of economic growth and development and why the management of natural resources cannot be left to the free market;
- The importance of good governance for achieving sustainable development;
- Whether the government can and should intervene to obtain sustainable development and combat poverty, climate change, biodiversity loss, and resource depletion;
- The role of urban areas, in which more than half of the world population currently lives, for achieving sustainable development.

RESEARCH SKILLS / QUANTITATIVE SKILLS
After successfully completing this course, you will be acquainted with theoretical and empirical methods for studying economic growth, the effects of market failures, the management of natural resources, and the effects of different policy interventions.

BRIDGING THEORY AND PRACTICE
After successfully completing this course, you will be able to select, frame and qualitatively describe a challenge in the context of sustainability that is urgent, multidisciplinary, and linked to your personal interest. You will also be able to present a well-founded research proposal in an online pitch that is embedded in the academic literature.

SOCIAL SKILLS
After successfully completing this course, you will be able to present and actively discuss themes relevant to this course.

BROADENING YOUR HORIZON
After successfully completing this course, you will be able to explain:

- The interactions of the world economy, global society, and the natural environment that are important for sustainable development;
- Why sustainable development calls for socially inclusive and environmentally sustainable economic growth.

Course Content

Sustainable development is the central challenge of our time. Today, the Earth is inhabited by more than 8 billion people. This is 10 times more than at the start of the Industrial Revolution in the 18th century. Every year, these people produce more than 100 trillion US dollars of output or 200 times more than at the start of the Industrial Revolution. Both population and output are projected to keep growing in the 21st century. Although global economic development has brought widespread prosperity, more than 700 million people still live in extreme poverty, and human activities may plunge the world into a gigantic environmental crisis caused by climate change and biodiversity loss. We live in the Anthropocene where human activity has become a dominant influence on the Earth’s climate and natural environment. To eradicate poverty and prevent environmental catastrophes, a transition

needs to be made from the business-as-usual path to the sustainable development path. Making this transition requires good governance by governments, citizens, and businesses.

The course is organized around the Sustainable Development Goals as adopted by the UN in 2015. The first week will start with a general introduction that sketches several important sustainability issues, illustrated by empirical evidence. During the course, we pay attention to the scientific as well as to the economic and societal dimensions of the identified challenges for sustainability. Furthermore, both analytical side (i.e., how to make sense of the interactions of the economy, society and the environment?) and the normative or ethical side (i.e., what should be the objectives of a well-functioning society?) of sustainable development will be discussed during the course.

The topics that will be dealt with during the course are:

1. Growth and development and links to capital accumulation and technological change;
2. Ending global poverty, improving education, and providing basic health care;
3. Management of natural resources and planetary boundaries;
4. Climate change including climate science and environmental policies;
5. Biodiversity and land-use change;
6. Global governance.

Additional Information Teaching Methods

Lectures (with interactive elements); Tutorials (including presentation and discussion sessions); MOOC (to do at home prior to the lectures and tutorials)

Method of Assessment

Written exam – Individual assessment
Interim Assignments – Individual and group assessment

Literature

- Sachs, Jeffrey D., The Age of Sustainable Development, 2015, Columbia University Press, New York. https://cup.columbia.edu/book/the-age-of-sustainable-development/9780231173155
- Collection of articles.