# Facets of Sustainability

## Objective of Qualification (competencies)
- A notion of the concept of natural resource flows (e.g., carbon cycle, urban hydrology, phosphorus cycle)
- "Ecological numeracy": Knowledge of key data (e.g., the distribution of population across continents and their growth trends, statistical reach of fossil fuel resources, per capita energy and water consumption in different parts of the world), capability of estimating them in broad strokes and performing computations with them.
- Knowledge of international political efforts to promote sustainability.
- Basic notion of different disciplinary approaches towards operationalising the concept of sustainability (e.g., ecology, economics …)

## Contents
- Overview of selected global ecological sustainability deficits (e.g., climate change; depletion of freshwater, soil and forest resources; habitat fragmentation; persistent organic pollutants, etc.) with a revisiting of their natural science foundations (at high school diploma level)
- The role of human activities in creating these deficits: Historically, at present, and in scenarios of the future
- How sustainability and sustainability deficits have been perceived over the last centuries. Classics of sustainability literature (e.g., Malthus, Carson, Schumacher, Club of Rome, also Lomborg); disciplinary and interdisciplinary approaches for the analysis of the sustainability theme
- Sustainability politics: Guiding principles and action plans the world has come up with, at international, national and local levels (Agenda 21, Green communities movement, NGOs, etc.)

## Recommended Literature
- Materials on the Website of the Intergovernmental Panel on Climate Change (IPCC), f.ex. current Assessment and Special Reports  https://www.ipcc.ch

## Teaching and Learning Methods
- Lectures by I. Peters, HCU colleagues and a range of external experts in the respective fields

## Exam(s)
- **Precondition of Examination**
  - Semester work (collection) (S): Successful completion of several smaller homeworks

## Additional Information
- **Previous Knowledge / Conditions for Participation (in form and content)**
- **Applicability of Module**
- **Frequency of Offering**
- **Course Language**
  - English

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