
404.627 The Sustainability Challenge – Syllabus

Thomas Brudermann, as of September 2025.

Content: This course explores key approaches to sustainable development based on the book *Earth4All* by the Club of Rome. Participants will critically discuss major sustainability challenges and the necessary societal turnarounds, with a focus on poverty, inequality, female empowerment, food, and energy. The course further provides training in academic writing, including research approaches and the conventions of scientific writing. On this basis, students will create their own academic paper as individual work and discuss their findings with peers.

Objective: The seminar aims to provide students with a clear understanding of the main sustainability challenges and the transformative approaches discussed in *Earth4All*. A further goal is to strengthen their ability to conduct independent research and to produce well-structured scientific papers. Students will practice academic argumentation and learn to communicate complex sustainability topics in both written and oral formats.

Teaching and learning method: The course combines instructor input, literature study, and interactive elements such as webinars, presentations, and discussions. A key element is the December workshop, in which student groups design and implement specific discussion formats (panel discussion, debate club, world café, Pecha Kucha, fish bowl). Additional learning activities include individual assignments, and continuous feedback on academic writing.

Assessment: The assessment is based on

- 1) Active participation (30%)
 - Presentation & one-pager “My personal challenge” (individual work, due in October)
 - Workshop contribution (group work, due in December)
 - Engagement in class discussions, webinars, and workshop activities.
- 2) Academic paper (70%)
 - Individual written paper (3,000 words, min. 10 scientific references)
 - Draft due in December, final version in January.
 - Topic: Related to one of the turnarounds in *Earth4All*.
 - Further information on the requirements/assessment criteria can be found in the feedback template on Moodle.

Literature:

Dixon-Declève, S., Gaffney, O., Ghosh, J., Randers, J., Rockström, J., Stoknes, P.E. (2022). *Earth for All: A survival guide for humanity*. New Society Publishers.

404.629 The Sustainability Challenge – Reading and Reflection – Syllabus

Thomas Brudermann, as of September 2025.

Content: This course is designed as a reading and reflection seminar. Students will engage with academic papers on sustainability transitions in a reading-club format and critically discuss them in class. In addition, sustainability practitioners will be invited to share their experiences, providing insights into real-world challenges of sustainable development.

Objective: After completing the course, students will be able to critically analyze and reflect on concepts and global issues related to sustainability transitions. They will develop the ability to discuss policy measures for a transition to sustainability and to connect academic literature with practical challenges.

Teaching and learning method: The course is structured as an interactive seminar. Each session builds on preparatory reading of scientific papers (1–2 per week). Students submit discussion questions in advance, pitch the key arguments of the papers in class, and actively participate in plenary discussions. Practitioner inputs will complement the academic debates and allow students to reflect on the connection between theory and practice.

Assessment: The assessment is based on

- 1) Active participation (continuous assessment, 75%)
 - Reading of assigned scientific papers in preparation for each session.
 - Submission of two discussion questions the day before each meeting.
 - Short in-class pitch of the paper's main ideas.
 - Active participation in plenary discussions.
- 2) Learning diary (continuous reflection on readings and discussions, to be submitted at the end of the course, 25%)
 - Short paper summary
 - Three main take-aways of the paper (250 words)
 - Strengths/weaknesses of the paper

Literature:

The required literature will be announced on Moodle.