

**LEHRSTUHL FÜR STEUERUNG INNOVATIVER
UND KOMPLEXER TECHNISCHER SYSTEME
JELIZAVETA TERNOVAJA M.A.**



Education Program SS 2020

**Seminar: Governance of Technological Systems -
Politics and policies of Sustainability: Concepts and tools to save the
Planet**

Room: F-21/03.80

Time: Wednesday, 16-18 h

Start: 22nd April 2020

Short Description:

“Sustainability” is a term that we often encounter in our everyday lives. As individuals, we are offered with organic food in supermarkets, and we can even drive electric cars. Institutionally, the signing of the 2015 Paris Agreement is considered a key event to keep CO₂ emissions under control and therefore make concrete steps towards saving the planet. At the same time, the “Fridays for Future” movement is filling up both real and virtual squares by urgently calling governments and media attention on taking sustainability seriously.

But what does “sustainability” really mean? And is it the same as “sustainable development”?

This course has two main aims. First, students will be introduced to “sustainability as a concept”. We will examine different views on “sustainability” and “sustainable development”, and discuss concepts like weak and strong sustainability, ecosystem services and ecological footprint. We will also see how a “system thinking” approach is key for sustainability. Second, we will examine how “sustainability as a value” has oriented concrete policies in the last decades, both in industry and in public decision-making. The overall goal of the course is to provide students with the necessary tools not only to dialogue with other scientists working with sustainability (e.g. environmental sciences, management studies), but also to potentially devise - as future (advisors to) policy-makers - sustainability policies by adopting a system thinking approach.

The course is linked to the Nachhaltigkeitswoche (NaWo) at Bamberg University (25th-29th May 2020). Beyond course attendance, students are warmly recommended to participate at least to one activity organized during the NaWo. Furthermore, students will be able to participate to a guided “Handyfilm Workshop” where an exciting activity will be

proposed by working in groups together with other students of the Didaktik der Naturwissenschaften at Bamberg University.

Course Evaluation:

Assignments and discussion in class (20%) and final report (paper) (80%). An extra “top-up” to the grade can be obtained (20%) for the participation to the “Handyfilm Workshop” (see above).

Course structure:

The course, as well as the reading material, is taught in English. Lectures are structured on participation and discussion following Problem-Based Learning (PBL).

Course literature:

Students are expected to buy/get in advance the book by Meadows, D. H. (2008). Thinking in systems: A primer. White River Junction VT: Chelsea Green. Other reading material will be provided in digital form on the VC.

Course Syllabus:

The detailed Syllabus of the course will be circulated in due time.

Notes:

The seminar will be taught in English.

Registration:

Via FlexNow! From April 1st until May 10th 2020 or during the first lesson.

Office hours: by appointment

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