RUHR UNIVERSITÄT BOCHUM

MACROECONOMICS AND SUSTAINABILITY

COURSE OUTLINE SUMMER 2021

Prof. Michael Roos / Dr. Jan-Hendrik Kamlage

CONTENT

The ultimate goal of economic activity in an economy should be the well-being of the population now and in the future. In a sustainable economy, current activities should not compromise future well-being. However, future well-being is threatened by a variety of current developments such as climate change and environmental destruction, technological developments or rising economic inequality which is eroding support for politics. Ideally, governments would be forward-looking and take early actions in order to prevent problems that reduce the well-being of their populations in the future. Forward-looking public policy is a major challenge for political and practical reasons. A key practical challenge for governments is to anticipate possible future developments.

In this module, we discuss how science could inform governments about possible future developments. We discuss the problem of how to deal with complexity, uncertainty, not knowing and how it might be possible to anticipate future developments in the long-run over several decades. A popular method of foresight is scenario thinking or scenario analysis. While this method is not so often applied in academic contexts, it is often used in practice, both in the private and in the public sector. We introduce the method of scenario thinking, discuss its strengths and weaknesses, contrast it to model-based foresight methods and learn how to use it.

You will learn how to use scenario analysis in a practical example. We will develop scenarios for the city of Bochum for the year 2045 and analyze how climate change might affect the city and its inhabitants directly and indirectly. These scenarios foster future-oriented thinking and could potentially be used to guide policy-making of the city administration in order to adapt to the consequences of climate change and to make the city resilient against shocks.

MODULE OBJECTIVES

Students

- obtain an overview over the sustainability debate on future related issues,
- learn how to deal with complexity and uncertainty about the future,
- are introduced to foresight methods and their challenges, learn,
- learn how to work with scenario analyses and foresight methods in general,
- train literature research and writing scholarly papers,
- train scholarly presentations and discourse.

The module stimulates critical and creative thinking as well as co-creation. It aims at teaching methodological skills that are highly relevant for professional practice in the private and public sector, e.g. in consulting or public planning.

PREREQUISITES

You will need excellent skills in written and spoken English.
The successful completion of a "Studienleistung" is required (see below).

ORGANIZATION

The module has a special format. There will be a number of online live seminars, which require attendance. In these seminars, the focus is on interaction and discussion between participants and the lecturers. Participation is required because scenario analysis is typically an interactive and discursive process that cannot be learned alone.

In addition to the seminars, comprehensive study materials are provided in the Moodle course that accompanies the module ('Macroeconomics and Sustainability (075250-SoSe21)'). **Regular self-study of this material is absolutely necessary to succeed in this module**. You are expected to work through the relevant material in the Moodle class before the seminar sessions. If you do not come prepared to the seminar sessions, reasonable work in the seminars is not possible.

You will not pass the module, if you do not attend the seminar regularly and if you do not do the preparatory exercises in the Moodle course. The exercises count as "Studienleistung".

To participate you have to sign in to the Moodle course until 12 April 2021, 6 p.m. as well as attend the first meeting on 22 April 2021. After the first session, students of the Faculty of Management and Economics also have to register in the **FlexNow system**. EELP students can participate, too. They need permission by Prof. Roos.

Participants: 20

Assessment: Term paper (100%)

Paper due: 16 August 2021, 12.00 h, submission seminar paper via mail (mak@rub.de).

Please consult the "Guidelines on how to write a seminar paper at the chair of macroeconomics", see https://www.ruhr-uni-bochum.de/mak/mam/content/guidelines_final.pdf

Time: Thursday 12.00 – 15.30 h, video conference via Zoom

NOTE: We won't have class every week, so please check the schedule below. Also, times differ.

Start: 12 April 2021 (start of the module), 22 April 2021 (first online meeting)

REGISTRATION

The number of participants is limited to 20. If there are more than 20 students present in the first session, we will determine the participants by a lottery. Only those students who are accepted in the first online session can take the module, hence it is necessary to attend the first meeting.

After having been accepted, you must register in the FlexNow system (if you are a student in the department of management and economics) in the time from 22 April to 21 May 2021.
If you fail to register in the FlexNow system, you cannot get credit for the module.

SCHEDULE

The following schedule of the online meeting is preliminary and subject to change. Please not that the times differ.

Date	Time	Topic
22 April	14:00 – 15:30	Course introduction
29 April	14:00 – 15:30	Thinking about the future: utopias, dystopias and foresight methods
6 May	12:00 – 15:30	Introduction to scenario analysis
20 May	12:00 – 15:30	Case study: Drivers of climate effects on the city Bochum
10 June	14:00 – 15:30	Assessment of driving forces: Impact and uncertainty
17 June	14:00 – 15:30	Scenario development
1 July	14:00 – 15:30	Narratives and images
8 July	14:00 – 15:30	Warning signal
15 July	12:00 – 15:30	Strategies for the city of Bochum derived from the scenarios
22 July	14:00 – 15:30	Buffer

The Zoom-Links for the meeting will be provided in the Moodle course.
Potential changes of the schedule will be announced in Moodle.

SELF-STUDY

This module contains 120 hours of self-study.
Your self-study will be guided by the accompanying Moodle course 'Macroeconomics and Sustainability (075250-SoSe21)'. The Moodle course is not just supplementary, but an integral part of the module. You have to do a number of exercises in the Moodle course to be prepared for the seminar. **If you do not do these exercises on time, you cannot submit the term paper and hence cannot get a grade and credit for the module.**

READINGS

See Moodle course 'Macroeconomics and Sustainability (075250-SoSe21)'.

A good introduction, which is avalaible as an e-book in the RUB library, is:

Haigh, Nardia (2019). Scenario planning for climate change – A guide for strategists. Routledge: London and New York