

## MACROECONOMICS II

### COURSE OUTLINE WINTER SEMESTER 2022/23

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#### CONTENT

This module presents, compares and contrasts different macroeconomic modeling paradigms. Students will get to know several advanced ways in which economic growth can be modeled and what assumptions and fundamental views on economic dynamics underlie each strategy. In particular, the mainstream Dynamic Stochastic General Equilibrium (DSGE) approach is compared to alternative approaches such as the System Dynamics (SD) approach. The goal is to highlight the basic features, strengths and weaknesses of the models discussed and the different views they reflect on the nature of economic processes. Students will also learn how a complexity view on the economy differs from the neoclassical view and how it can be represented through alternative modeling strategies.

Students will also get the opportunity to apply their newly attained knowledge in some applied modeling tasks.

#### MODULE OBJECTIVES

- You get an overview of different macroeconomic modeling paradigms.
- You learn about the major class of mainstream macroeconomic models, the Dynamic Stochastic General Equilibrium (DSGE) approach with both its features and drawbacks.
- You learn how economic dynamics can be represented using systems of differential equations and System Dynamics (SD) models.
- You acquire methodological knowledge about creating and solving macroeconomic models such as continuous dynamic systems, DSGE- and SD-models.

#### PREREQUISITES

Students will need excellent English skills and the willingness to deal different types of economic models, some mathematical and some computational. Students should also be willing to deal with some macroeconomic models in a hands-on fashion.

#### ORGANIZATION

This module consists of lectures and some tutorials. There will also be a **Moodle course** that will likely go online the week starting on October 10<sup>th</sup>.

**Participants:** no restriction

**Lectures/tutorials:** In the tutorial sessions, students can work on their homework tasks and ask questions. Students are expected to **bring their own laptops** and pre-install some Open Source software to make this feasible.

**Assessment:** A **final exam** that will take place in February **2023**. The date will be announced shortly in the Moodle course. In order to qualify for the final exam, you will need to submit **six ungraded homework assignments** (Studienleistung) that can be worked on in the tutorial sessions. The topics of the final exam will mirror those of the homework assignments very closely.

**Time and place:** Friday, 10:00 to 12:00 (HGB 50), Friday 12:00 to 14:00 (GD02/236) (in person, except where noted differently in the lesson plan and below) **The first two sessions will take place on different days and times, they will be streamed live on Zoom and available as recordings on Moodle.**

**Start:** **October, 11<sup>th</sup> 2022, 12:30 – 14:00 – Zoom live & recorded:** introduction to the course.  
Second session: **October, 20<sup>st</sup> 2022, 16:15 – 17:45 – Zoom live & recorded**  
(The links to the zoom sessions will be provided in due time on Moodle)

**Resit exam:** date and further details will be announced in due time.

**Exam Registration:** Will be announced in the Moodle course.

**Exam De-Registration:** Will be announced in the Moodle course.

Both via **FlexNow**

## SELF-STUDY

This module contains 120 hours of self-study and applied homework.

## COURSE TEXTBOOK

**Relevant material will be provided on Moodle.**

## SCHEDULE

The **preliminary** course schedule will be available on Moodle before the introductory session. Any change will be announced on Moodle in due course.