

Master in Economic Policy
Winter 2025/26

Syllabus
Economic Growth
Chances and Limitations

The course is primarily directed at students of MEPS, the Master of Economic Policy degree program in Siegen. However, students of the University of Siegen who have achieved the necessary background knowledge in Microeconomics and Mathematical Methods for Economists are welcome. This should apply in particular to students on the Management and Markets degree program.

Method of teaching:	The form of teaching will be blended learning. There will be a number of Webex-sessions combined with three blocks of in-class-lectures and tutorials.
Schedule	You can find the dates and any updates on Unisono. I included a table with the current planning below. The first session will be a Webex-session. It will take place on Tuesday, October 14. Students who have registered in unisono will receive the invitation link by email.
Exams	Written exams will take place according to the rules of the department
Credits	Upon successful completion of the examination, students receive 6 credit points
Instructor:	Prof. Dr. Karl-Josef Koch koch@vwl.wiwi.uni-siegen.de
Office Hours:	On request only; please ask for appointments by email
Course Website:	http://www.wiwi.uni-siegen.de/vwli/lehre/ Print versions of slides, exercises and some additional material will be posted on the course website. Short-term organizational announcements and other information will be shared on the website as well. Please check the website regularly.

Status of scheduling at the beginning of the semester

Tue	October 14	2 p.m. - 4 p.m.	Webex
Tue	October 28	2 p.m. - 4 p.m.	Webex
Thu	November 06	12 a.m. - 6 p.m.	US-S 0101
Fri	November 07	8 a.m. - 2 p.m.	US-S 0101
Thu	November 20	12 a.m. - 6 p.m.	AH-D 117
Fri	November 21	8 a.m. - 2 p.m.	US-A 017
Tue	November 25	2 p.m. - 4 p.m.	Webex
Tue	December 09	2 p.m. - 4 p.m.	Webex
Tue	December 16	2 p.m. - 4 p.m.	Webex
Tue	January 13	2 p.m. - 5 p.m.	Webex
Thu	January 22	2 p.m. - 6 p.m.	AH-D 117
Fri	January 23	8 a.m. - 12 a.m.	US-A 017

Content

1 Introduction

1.1 Topic, Goals and Methods

1.2 Regularity and Balance

1.3 Stability

1.4 Convergence

1.5 Sustainability

2 Theories of Economic Growth

2.1 Capital Accumulation and Maximization of Intertemporal Utility

2.2 Returns to Scale and Sustained Growth: The AK-Model

2.3 Endogenous Technical Progress: Models of Romer, Jones, and Others

2.4 Human Capital Accumulation: The Approach of Uzawa and Lucas

2.5 Product Differentiation: The Romer Model

2.6 Creative Destruction: From Schumpeter to Aghion and Howitt

2.7 Growth and Climate Change: A Simplified DICE Model

2.8 Miscellaneous: A Little Bit about Some of All the Other Topics of Interest

Prerequisites

Students should be familiar with advanced methods of Microeconomic Theory, advanced methods of Calculus for Economists and basics of Econometrics. The necessary techniques for dynamic modeling and analysis are provided on the fly. Some basic techniques of intertemporal optimization will be taught in the lectures and trained in the tutorials.

Mathematical modeling is the predominant method used in the course. You have to be aware of that!

Selected References

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