

# Games and Information

## MEPS Course Summer Semester 2024

Karl-Josef Koch

### Syllabus

The course is primarily directed at students of MEPS, the Master of Economic Policy 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.

<b>Method of teaching:</b>	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.
<b>Schedule</b>	You can find the dates and any updates on Unisono. I included a table with the current planning below.  The first session will take place on Monday, April 8.  Students who are registered in unisono will receive the invitation link by email.
<b>Exams</b>	Written exams of one hour will take place according to the rules of the department.
<b>Instructor:</b>	Prof. Dr. Karl-Josef Koch karl-josef.koch@uni-siegen.de
<b>Office Hours:</b>	On request only
<b>Course Website:</b>	<a href="http://www.wiwi.uni-siegen.de/vwli/lehre/">http://www.wiwi.uni-siegen.de/vwli/lehre/</a> 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

Mo	April 8	14 - 16	Webex
Mo	April 15	14 - 16	Webex
Mo	April 22	14 - 20	US-D 207
Tue	April 34	08 - 14	US-A 134
Mo	April 29	14 - 16	Webex
Mo	May 6	14 - 16	Webex
Mo	May 13	14 - 16	Webex
Mo	May 27	14 - 20	US-D 207
Tue	May 28	08 - 14	US-A 134
Mo	June 6	14 - 16	Webex
Mo	July 1	14 - 20	US-D 207
Tue	July 2	08 - 14	US-A 134

## Course Structure

- Motivation
- Introduction
- Basics of Game Theory
- Basics of Decision under Uncertainty
- Basics of Incomplete and Asymmetric Information
- Moral Hazard
- Adverse Selection
- Signaling

## Prerequisites

Students should be familiar with advanced methods of Microeconomic Theory and advanced methods of Calculus for Economists.

## References

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- CARLTON, D. W., AND J. M. PERLOFF (2005): *Modern Industrial Organization*. Pearson Addison Wesley, fourth edn.
- GIBBONS, R. S. (1992): *Game theory for applied economists*. Princeton University Press.
- HOPPE, E. I., AND P. W. SCHMITZ (2018): “Hidden action and outcome contractibility: An experimental test of moral hazard theory,” *Games and Economic Behavior*, 109, 544–564.
- LAFFONT, J.-J., AND D. MARTIMORT (2002): *The Theory of Incentives*. Princeton University Press.
- LUCCHETTI, R. (2011): *A Primer in Game Theory*. Società Editrice Esculapio.
- MACHO-STADLER, I., AND J. D. PÉREZ-CASTRILLO (2001): *An Introduction to the Economics of Information*. Oxford University Press, second edn.
- MESTERTON-GIBBONS, M. (2019): *An introduction to game-theoretic modelling*, vol. 37. American Mathematical Soc.
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- OSBORNE, M. J., ET AL. (2004): *An introduction to game theory*, vol. 3. Oxford university press New York.
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