

COURSE SYLLABUS

ADVANCED SEMINAR: METAVERSE DESIGN AND STRATEGY

PROF. DR. STEFAN SEIDEL
WINTER TERM 23-24, UNIVERSITY OF COLOGNE

Time	11 th of October 2023, Tuesday 10:00 to 13:30 29 th of November 2023, Tuesday 09:00 to 18:00 24 th of January 2024, Monday 09:00 to 18:00
Location	Room -1.502, Building 415 (Sibille-Hartmann-Straße 2-8)
Language	English
Module	1277MSSIS1 Specialization Module Seminar Information Systems I 1277MSSIS2 Specialization Module Seminar Information Systems II
ECTS	6
Goal	The seminar addresses questions of design and strategy related to the emerging idea of the Metaverse. Students will understand relevant concepts, theories, methods, and applications to studying the Metaverse and will be able to analyze design approaches as well as strategic choices organizations make in relation to the emerging Metaverse.
Format	The seminar consists of four key elements. <ul style="list-style-type: none">• First, students will be exposed to main concepts, theories, methods, and applications related to the Metaverse.• Second, each student will work on a specific topic related to those concepts, theories, methods, and applications and write a seminar paper. Topics will be presented and assigned in the first session.• Third, other students—peers—will read and evaluate those seminar papers, each student providing a review on another student's work.• Fourth, seminar papers will be presented and discussed in class.
Contact	Stefan Seidel stefan.seidel@wiso.uni-koeln.de
Grading	Final paper: 60% Presentation: 20% Peer review: 20%
Application	Application for this course is possible via KLIPS 2 in the first registration period. Binding registration for the exam is also done via KLIPS 2.
KLIPS 2	https://klips2.uni-koeln.de/co/pl/ui/\$ctx/wbLv.wbShowLVDetail?pStpSpNr=468570
ILIAS	Master students will be added automatically after KLIPS registration.

Changelog for this document

COURSE DESCRIPTION

Topic

So Hiro's not actually here at all. He's in a computer-generated universe that his computer is drawing onto his goggles and pumping into his earphones. In the lingo, this imaginary place is known as the Metaverse. Hiro spends a lot of time in the Metaverse.

Neal Stephenson, *Snow Crash*

Hiro is the main character in Neal Stephenson's novel *Snow Crash*. Originally published in 1992, *Snow Crash* describes a future dystopia where Hiro—and many others—escape a dreadful future in the Metaverse. In Stephenson's novel, the Metaverse is a large-scale virtual world that is populated by avatars.

In recent years, the term “Metaverse” (often referring to “the” Metaverse, capitalized and singular) has gained significant attention. We have been witnessing the rise of various crypto-based metaverses (in plural form and lowercase), new Metaverse applications, and public discourse around how the Metaverse will change private and professional life. However, it's important to note that “Metaverse” is currently more of a rhetorical device for conceptualizing a wide range of contemporary developments, rather than a term with a universally accepted definition. These developments include next generation video game engines, new business models around video games, the application of augmented and virtual reality, novel types of experiences, artificial intelligence for content generation, and the convergence and merging of various private and professional applications, among others.

It is against this background that this seminar aims to discuss the notion of the Metaverse and explore key questions around Metaverse design (i.e., the design processes conducted by, and the decisions made by, various involved actors that will shape the Metaverse) and Metaverse strategy (i.e., the strategic decisions private and public organizations make in relation to the emerging Metaverse).

Example Seminar Paper Topics

- Blockchain, distributed ledger, and the Metaverse
- Metaverse history and predecessors
- Technical foundations of the Metaverse
- The Metaverse and platform ecosystems
- The Metaverse and augmented reality
- The Metaverse and virtual reality
- Metaverse strategies
- Metaverse openness
- Video games and the Metaverse
- Identities in the Metaverse
- Metaverse ethics
- Generative AI and the Metaverse

Learning Objectives

Students will...

- understand the main concepts, theories, and methods related to the Metaverse;
- analyze design approaches as well as strategic choices organizations make in relation to the emerging Metaverse;
- identify relevant data sources, collect data, and process the data in order to develop a key deliverable of the seminar project;
- provide critical feedback on their peers' work; and
- write up their findings in a seminar paper, present them, and defend them in critical discussion with fellow students.

Readings

Ball, M. (2022). *The metaverse: and how it will revolutionize everything*. Liveright Publishing.

Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., ... & Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66, 102542.

Peukert, C., Weinhardt, C., Hinz, O., & van der Aalst, W. M. (2022). Metaverse: How to approach its challenges from a BISE perspective. *Business & Information Systems Engineering*, 64(4), 401-406.

Seidel, S., Berente, N., Nickerson, J., & Yepes, G. (2022). Designing the metaverse. *Hawaii International Conference on Systems Sciences (HICSS 2022)*.

Further literature will be provided at the first session.

SCHEDULE

#	Date & Time	Content	Room	Deadline
1	11.10.2023	Welcome presentation, organizational issues, and assignments	Room -1.502, Building 415	n/a
-	18.10.2023	Exam registration deadline	None	23:59 (via KLIPS)
-	22.11.2022	Submission of first paper draft	None	23:55 (via ILIAS)
2	29.11.2023	Mid-term presentations and feedback	Room -1.502, Building 415	Peer Review: 28.11.2022, 23:55 (via ILIAS)
3	24.01.2024	Final presentations	Room -1.502, Building 415	Presentation: 23.01.2024, 23:55 (via ILIAS)
-	07.02.2024	Submission of final paper	None	23:55 (via ILIAS)