Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Emancipatory Digital Transformation
Code der Lehrveranstaltung	96127
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	INFO-01/A
Sprache	Englisch
Studiengang	Master in Ökosozialem Design
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	Dott. Robert Fridolin Wotan Schnüll, RobertFridolinWotan.Schnuell@unibz.it https://www.unibz.it/en/faculties/design-art/academic-staff/person/53667
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Zweites Semester
Studienjahr/e	1st and 2nd year
KP	6
Vorlesungsstunden	60
Laboratoriumsstunden	0
Stunden für individuelles Studium	0
Vorgesehene Sprechzeiten	18
Inhaltsangabe	Based on their interests and focus, students select courses in areas Observe, Analyse & Apply and of Make & Intervene, to which the course in Emancipatory Digital Transformation belongs. This course critically explores digital transformation from a social-ecological and emancipatory perspective, engaging students with the ethical, socioeconomic, political, and ecological implications of digital technologies. The course challenges dominant techno-fixing

	narratives and instead centers digital justice, commons, sustainability, and care. Students will explore how digital infrastructures, platforms, and products shape societal structures, and reinforce or resist systems of power and exclusion. The course offers both critical reflection and hands-on experimentation, encouraging students to envision and prototype digital tools, services, or interventions that challenge dominant digital paradigms and propose emancipatory alternatives fostering social-ecological transformations. The course will touch upon a wide spectrum of concepts and issues, such as: concentration of power, surveillance and social control, social Media (Misinformation, Propaganda, Potentials, Alternatives), AI (types, biases, impact, labour, democratic control, potentials, alternatives), environmental and social impact of digital technologies, Critical Computing, SHCI (Sustainable HCI), Digital sovereignty and Data justice, Digital Commons, Free and Open-Source Software, Platform Cooperativism, Civic and Social Infrastructures, Collective empowerment, civic society and social movements.
Themen der Lehrveranstaltung	If we apply Stafford Beer's heuristic "The purpose of a system is what it does" to today's networked society, a striking discrepancy becomes visible between the original vision of the World Wide Web and its current reality. Instead of collectively producing knowledge and fostering collaboration through the democratization of digital communication, we increasingly find ourselves dependent on infrastructural power centers under private ownership and without meaningful societal control. This trajectory risks paving the way toward a form of techno-feudalism. The digital sphere thus generates unwanted dependencies in which belief in how algorithms and extraction logics of platform economies operate has replaced reflective, self-determined use in a more and more enshittified digital experience. This semester, we aim to turn the tables: we reclaim agency over our digital practices and to collectively design a radical counter-proposal. • What would collective digital infrastructure look like if it extended the physical space instead of trying to replace it? • How can digital infrastructures become materially grounded

	again, climate neutral locally operated, to rebuild trust? • How might interfaces be shaped around the situated needs of actual users, rather than forcing people to adapt their behavior and expression to the standardized templates of platform economies? We will design and build a usable, local, communication and collaboration platform as an alternative to systems such as Microsoft Teams or Google Workspace. The environment will consist of many different components that together form a functioning digital ecosystem. Each element should be able to operate independently, while also becoming part of a larger whole. Whether it is an old computer revived as a wind-powered server hosting a google docs alternative on the top of the Renon, or a water-powered server running a local adaption of an F/LOSS based Large Language Model as an alternative to ChatGPT next to the Adige, we will explore how infrastructural imagination can become tangible. Through a series of functional prototypes, we will develop a usable and comprehensive digital solution for collaborative work within the university context. During the semester we will: - learn the technical foundations of digital technologies and networks, enabling us to host local infrastructures – from websites to platforms - analyze the power asymmetries produced by platform economies and software-as-a-service models and their influence on democratic societies - critically reflect on the rise of generative technologies in the information age - identify local demands and expectations toward digital tools - design alternatives based on existing Free and Open-Source technologies - realize these ideas as group-based, autonomous functional physical prototypes - interconnect them into a shared, decentralized platform in order to make a powerful counter-model experientially accessible.
Stichwörter	Digital empowerment; socio-technical design; digital infrastructures; decentralization; digital sovereignty; free/libre and

	open-source software (F/LOSS); sustainable HCI; platform alternatives; collaborative technologies; community networks; ethical technology; prototyping.
Empfohlene Voraussetzungen	
Propädeutische Lehrveranstaltungen	
Unterrichtsform	The course combines frontal lectures, participatory seminars, critical discussions, hands-on prototyping workshops, and group project sessions.
Anwesenheitspflicht	recommended
Spezifische Bildungsziele und erwartete Lernergebnisse	Knowledge and understanding Students of the Master in Eco-social Design will have developed their own individual project practice and will be able to: - develop creative solutions and processes - making complex problems tangible through design, visualization and storytelling - developing prototypes or delegating their development Applying knowledge and understanding Students will be able to make tangible ideas, reports and projects, such as sketches, visualisations, mock-ups, models, prototypes, interventions and prototype events. Making judgements Students will be able to: - take responsibility for the development and management of projects and activities - compare and evaluate concepts, practices and projects in their various contexts - judging independently and critically requirements, needs and potential of an environment, and of a group or community, as well as the contribution of a project to local and regional economic cycles and to increasing solidarity relations Communication skills Students will be able to: - communicate convincingly in different ways and with different

	audiences - present projects convincingly Learning skills Students will be able to working independently to learn according to different situations and in a personal way through the development of prototypes, models, mock-ups and the feedback they provide.
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	Assessment is based on continuous participation and the development of a concrete outcome. Students begin by identifying and examining specific conflicts, needs, or dependencies within contemporary digital environments. These individual investigations will be the foundation of the formation of groups based on shared trajectories. Each group will conceptualize, design and potentially implement a functional prototype that addresses a particular aspect or use scenario within a broader, collectively operated infrastructure. Every project should be able to stand on its own. At the same time, its full potential unfolds in relation to the other components of the emerging system as described in the semester briefing. To enable experimentation, a set of shared technical foundations and self-hosting environments will be provided. The aim is not to require advanced programming skills, but to allow students to make informed design, infrastructural, and organizational decisions while creating real systems. Instead of contributing to the shared platform, students may also choose to pursue an individual design project or write a research/position paper concerning one of the previously described course contents. This option must be coordinated with the instructors. Non-attending students:

	Students who do not attend regularly are expected to develop an equivalent body of work independently. They may choose between: - an individual design or prototyping project (conceptual, strategic, or functional) - a research or position paper concerning one of the previously described course contents Non-attending students are responsible for self teaching themselves with the theoretical and technical foundations introduced during the semester. If additional time slots of the instructors are available Check-ins can be arranged as needed. Assessment is based on the coherence of the approach, depth of investigation, quality of execution, and the capacity to critically relate the work to the broader discourse of the previously named content of this course.
Bewertungskriterien	For attending students: - Engagement (20 %) - Prototype development & documentation (50 %) - Final presentation & reflection (30 %) For not attending students: - Prototype development & documentation (50 %) - Final presentation & reflection (50 %)
Pflichtliteratur	- Shoshana Zuboff (2018). The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. Profile books. - Yanis Varoufakis (2023). Technofeudalism. What killed capitalism. Bodley Head. - Cory Doctorow (2025). Enshitification: *Why Everything Suddenly Got Worse and What To Do About It*. Verso Books. For German readers (English version is not published yet): - Rainer Mühlhoff (2025) AI and the New Fascism. Reclam Verlag.

	The specific sections of this publications as well as additional papers and essays will be made available during the semester via MS Teams.
Weiterführende Literatur	
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Hochwertige Bildung