

## SYLLABUS

### Course description

The course belongs to the class “caratterizzante” in the MA in Eco-Social Design (LM-12). This course is a mandatory optional subject in the area “**Make & Intervene**”.

Course title	<b>Social Interaction Design - Interface Design</b> <b>Area: Make &amp; Intervene</b>
Course code	<b>96106</b>
Scientific sector	<b>ICAR/13 – Disegno Industriale</b>
Degree	<b>Master in Eco-Social Design (LM-12)</b>
Semester	<b>II</b>
Year	<b>1<sup>st</sup> and 2<sup>nd</sup></b>
Credits	<b>6</b>
Modular	<b>No</b>
Lecturer	<b>Dr. Teresa Palmieri</b> e-mail: Palmieri Teresa <a href="mailto:Teresa.Palmieri@unibz.it">Teresa.Palmieri@unibz.it</a> office: F4.06b webpage: <a href="https://www.unibz.it/en/faculties/design-art/academic-staff/person/47597-teresa-palmieri">https://www.unibz.it/en/faculties/design-art/academic-staff/person/47597-teresa-palmieri</a>
Scientific sector of the lecturer	<b>ICAR/13</b>
Teaching language	<b>English</b>
Teaching assistant (if any)	-
Office hours	<b>18</b>
Total lecturing hours	<b>60</b>
Total hours of self-study and/or other individual educational activities	<b>about 120</b>
Attendance	<b>Strongly recommended.</b> <b>To not-attending students: please contact the lecturer.</b>
Prerequisites	-
Course page	

### **Course description**

The course will explore the topic of “Social Interaction” starting by breaking down the term and discussing what it covers. In consideration for the ongoing digitalization of our public and everyday realms attention will be given to different analogue, digital, hybrid mediation of social interaction and their potential to enable or hamper meaningful dialogue, exchange and action between humans and non-humans in relation to eco-social transformations. After these preliminary reflections, we will directly step into the phase of making. We will explore and experiment with methods and approaches of interaction design, user experience and participatory design (e.g. personas, scenario building, prototyping, design games, user testing and users’ feedback integration, etc.), digital modular systems and paper prototyping. By adopting an interventionist design approach, we will iteratively refine the prototypes of situated interventions, installations, interfaces, platforms, games etc. with focus on the urban environment, exploring the city as an interface for social interaction. At the end of the course, the developed interactive prototypes will be made available to be publicly experienced in public or semi-public spaces of Bolzano during the end of semester show. On the one hand, we will learn by doing, testing, and building and on the other hand, through analytical reflection. The course offers the opportunity to integrate the student’s semester or master project work upon matching the requirements, that is, in this course, students can design, develop, and test social interactions that are part of their semester project.

### **Educational objectives**

From a theoretical point of view, students will be able to:

- Learn about the extent of possible social interactions
- Know the advantages and disadvantages that tangible technology can bring to social interactions
- Discuss the impact of digitalization on society
- Learn about practice-based research approaches and projects
- Discuss scientific publications related to the topics and research approaches addressed during the class

From a practice point of view, students will be able to:

- Pick the most suitable methods for their design project, according to its contexts, users, activities
- Develop concepts based on empirical data
- Collaborate with fellow students to develop a concept and a prototype
- Learn how to prototype and contextualize the concepts in a fast way
- Make the concept experienceable through methods such as scenario play
- Combine everyday materials with hardware and software tools for prototyping
- Present the prototype concept to the fellow students as well as to the intended user group (local initiative, organization, municipality)
- Plan and conduct tests of the prototype with the intended user group
- Implement feedback from users in a new stage of the prototype until the final one

From a documentation point of view, students will be able to:

- Highlight how their design process reflects the theoretical insights discussed during the class
- Communicate convincingly through a variety of modalities (written, oral, visual)
- Document and present the overall process clearly; show and name decision points; reflect critically

### **List of topics covered**

- Social interactions, both mediated by technologies and not
- Advantages and limitations of tangible interfaces to enable social interactions

- Critical reflection of digitalization of society – which role to take as an eco-social designer
- User experience methods to analyze interfaces usage
- Iterative development of experimental interfaces according to the interaction design approach
- Concept methods like “scenario play” combined with prototyping methods like “paper prototyping”
- Research-Through-Design approach: how to combine empirical insights with the conceptual framing of practice-based research
- Participatory design
- Expressing your ideas in a meaningful way

### **Teaching format**

Practice-based teaching with a balanced mix of frontal input, discussion rounds, experiments, method sessions, experts’ input, group presentations, reviews.

### **Learning outcomes**

#### *Knowledge and understanding*

The students will reflect on the concept of “social interaction” and which interactions should be digitally mediated and which ones should not. This course will show how to design interfaces for mediated human-to-human relations as well as for human and non-human interactions. Examples of new hybrid interactions will be provided. By adopting different practice-based research approaches, students will transfer their insights and ideas into physical, digital, hybrid, or analog prototypes.

#### *Applying knowledge and understanding*

The students will learn how to transfer qualitative insights into rough paper prototypes. In this way, they can gain a deeper understanding by both materializing their ideas and receiving feedback from others. In this way, the initial prototype will evolve into a more elaborate interface.

#### *Making judgments*

By testing the prototypes, the students will experience the users' sense-making of the interaction and its outcome and integrate the user feedback in their research process. Furthermore, by adopting a Research-through-Design framework, the students will be able to generate theoretical insights about their design.

#### *Communication skills*

By presenting their outcomes to fellow students, users, and experts, students will learn how to communicate their design choices, like the intended usage, the choice of material, or interaction pattern.

#### *Learning skills*

By reflecting on their design process, the students will learn about the participatory process and methods as well as the advantages of rapid prototyping through everyday materials.

### **Assessment: oral, video, and written**

- Oral: a presentation of the final prototype and the overall design process that has led to it. A template will be provided. Plus, critical discussion of the project focused on the choice of interaction patterns and satisfaction of needs related to the intended user group.
- Video: an explanatory video (max 2-minute long) presenting the prototype within its (user) context.
- Written: concise documentation of the pivotal steps of the process with an explanation of the motivations behind the design.

### Assessment of non-attending students

Non-attending students have the same assessment criteria as attending students. All requested assignments need to be done and all deliverables (both intermediary and final) need to be provided in time. The knowledge shared in the theoretical and practical lectures need to be acquired. Hence, the exam of non-attending students might last longer in order to test that specific knowledge has been acquired and applied to the presented project.

### Assessment language: English

#### Evaluation criteria and criteria for awarding marks

- Formal requirements like engagement in the class, adherence to deadlines
- Originality, coherence, and conceptual qualities of the design project in relation to its aims, interaction pattern used, context addressed
- Critical reflection on the project outcome and the topics discussed during the class
- Ability to work in a team, with partners and/or experts (social skills)
- Effectiveness in communicating both process and concept

#### Required readings

Bardzell, S. (2010). Feminist HCI: Taking Stock and Outlining an Agenda for Design, In Proceedings of SIGCHI Conference on Human Factors in Computing Systems (CHI '10).

<http://doi.org/10.1145/1753326.1753521> .

Bella, M., & Hanington, B. (2012). Universal Methods of Design 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions. MA: Rockport Publishers.

Bødker, S., Dindler, C., Iversen, O.S., & Smith, R.C. (2022). Participatory Design. Switzerland: Springer Cham. <http://doi.org/10.1007/978-3-031-02235-7>.

Cardullo, P, Di Felicianantonio, C., & Kitchin, R. (2019). The right to the smart City. Bingley: Emerald Publishing Limited.

De Lange, M. & de Waal, M (2019). The Hackable City: Digital media and Collaborative City-Making in the Network Society. Singapore: Springer.

De Valk, L., Bekker, T., & Eggen, B. (2015). Designing for Social Interaction in Open-Ended Play Environments. *International Journal of Design* 9(1), 107–120.

De Waal, M. (2013). The City As Interface: How Digital Media Are Changing the City, Rotterdam: Nai Publisher.

Heitlinger, S., Foth, M., & Clarke, R. (2024). Designing More-than-Human Smart Cities: Beyond Sustainability, Towards Cohabitation. Oxford: Oxford University Press.

Herlo, B., Irrgang, D., Joost, G., & Unteidig, A. (2022). Practicing Sovereignty: Digital Involvement in Times of Crisis. Bielefeld: Transcript Publishing. <http://doi.org/10.14361/9783839457603>.

Koskinen, I., & Hush, G. (2016). Utopian, Molecular and Sociological Social Design. *International Journal of Design* 10(1), 65–71.

Kurvinen, E., Koskinen, I., & Battarbee, K. (2008). Prototyping social interaction. *Design Issues*, 24(3), 46–57.

Höök, K. (2018). *Designing with the Body: Somaesthetic Interaction Design*. Cambridge & London: The MIT Press.

Hornecker, E., & Buur, J. (2006). "Getting a grip on tangible interaction: a framework on physical space and social interaction". In *Proceedings of the SIGCHI conference on Human Factors in computing systems*, 437–446. <http://doi.org/10.1145/1124772.1124838>.

Light, A. (2022). Ecologies of Subversion – Troubling Interaction Design for Climate Care. *Interactions* 29(1), 34–38. <https://doi.org/10.1145/3501301>

Redström, J. (2021). Research through and through design. *Artifact* 8(1-2), 16.1–16.19. [https://doi.org/10.1386/art\\_00016\\_1](https://doi.org/10.1386/art_00016_1).

Stappers, P. J., & Giaccardi, E. (2017). Research through Design. Chapter in: the Encyclopedia of Human-Computer Interaction, 2nd edition.

Valentine, L. (2013). *Prototype Design and Craft in the 21st Century*. London: Bloomsbury

### Supplementary Readings

Baibarac, C., Petrescu, D. (2021). Prototyping open digital tools for urban commoning. *CoDesign* 17(1), 83–100. <http://doi.org/10.1080/15710882.2019.1580297>.

Binder, T., De Michelis, G., Ehn, P., Jacucci, G., Linde, P., & Wagner, I. On the Objects of Design In *Design things*. Cambridge, MA: MIT Press, 51–77. ISBN: 9780262016278.

Digitalization for Sustainability (D4S). (2023). *Digital Reset, Redirecting Technologies for the Deep Sustainability Transformation*. München: oekom. <http://doi.org/10.14512/9783987262463>.

DiSalvo, C. (2012). *Adversarial Design*. Cambridge & London: The MIT Press.

DiSalvo, C. *Design as Democratic Inquiry: Putting Experimental Civics into Practice*, London: The MIT Press. <https://doi.org/10.7551/mitpress/13372.001.0001>

Le Dantec, C. A. (2016). *Designing Publics*, Cambridge & London: The MIT Press, 13–32. <http://doi.org/10.7551/mitpress/10513.001.0001>.

Sanders, E. B. N. (2002). "From user-centered to participatory design approaches". In *Design and the social sciences*, pp. 18-25. CRC Press.