

## SYLLABUS

### Course description

The course belongs to the class “caratterizzante” (obbligatoria) in the MA in Eco-Social Design (LM-12). This course is a compulsory subject in the area “Skills & Technologies”

Course title	<b>Interface Design</b> <b>Area: Skills &amp; Technologies</b>
Course code	<b>96003</b>
Scientific sector	<b>INF/01 – Discipline tecnologiche e ingegneristiche</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. Jennifer Schubert</b> office F4.01 <a href="https://www.unibz.it/en/faculties/design-art/academic-staff/person/38941-jennifer-liesbeth-schubert">https://www.unibz.it/en/faculties/design-art/academic-staff/person/38941-jennifer-liesbeth-schubert</a>
Scientific sector of the lecturer	-
Teaching language	<b>English</b>
Teaching assistant (if any)	-
Office hours	By appointment
Teaching language	<b>English</b>
Total lecturing hours	<b>60</b>
Total hours of self-study and/or other individual educational activities	<b>about 120</b>
Attendance	<b>recommended</b>
Prerequisites	-
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## Course description

The course will dive into the topic of “Interface Design” in an experimental manner, and sets the focus on the social interactions, which are enabled by interfaces. After a general discussion about the term “interface” and practice-based research approaches, we will directly step into the phase of making. Design methods will help to express utopian and dystopian ideas in a materialized way. We gain knowledge on the one hand side by doing, testing and building and on the other hand side by analytical reflection. Through creating a range of system visualizations and use-cases, we will grasp the topic of experimental interfaces on a practical and theoretical level. By testing and integrating feedback, we will iteratively develop one unique interface, which will be experienceable by others in the end of class – in the public or semi-public space of Bolzano. The course offers the opportunity to students to integrate their project work, where it fits the requirements of the course. Thus, students can develop, design and test interfaces and social interactions in the course, which are at the same time part of their project.

## Educational objectives

### Students will be able to:

- discuss and dismantle the term “interface”;
- learn about practice-based research approaches and projects;
- read and discuss scientific publications related to the research approach of the class;
- adapt the own design process related to the theoretical insights;
- develop concepts based on empirical data;
- collaborate with fellow students to develop an interface concept and prototype based on new or already existing semester or master project;
- learn how to prototype and contextualize the concepts in a fast way;
- make the concept experienceable with everyday materials;
- reflection of concepts related to the local development while considering the global context (“glocalized dimension” by Barry Wellman, 2002);
- use hardware and software tools for designing and producing prototypes;
- prepare and present the concept of the prototype to the fellow students as well as to the intended user group (local initiative, community, municipality);
- plan and conduct user tests of the interface prototype with the intended user group
- implement feedback from users in the new stage of prototype;
- communicate multilingually in a convincing way, through a variety of modalities (written, oral, visual);
- document the overall process and insights in a visual and comprehensible way (documentation template will be provided);
- develop and present one final prototype with an experienceable interface

### Knowledge will be acquired in the following fields:

- interface-design and user-experience design;

### List of topics covered

- Research-Through-Design-Approach (Findeli, Jonas 2004): How to combine empirical insights with the conceptual framing of practice-based research
- The process of “Analysis, Projection, Synthesis” (Jonas, 2004) to leave the common path behind and think outside the existing categories and assumptions

- *Concept* methods like “scenario play” combined with *prototyping* methods (e.g. “paper prototyping”)
- *User experience* methods to analyze the usage of interfaces
- iterative development of experimental interfaces
- learning by materializing (Ehn, 2008)
- expressing your ideas in a meaningful way

### **Teaching format**

Practice-based teaching with a balanced mix of frontal input, discussion rounds, experiments, method sessions, expert inputs, group presentations and reviews

### **Learning outcomes**

#### *Knowledge and understanding*

The students will reflect about the term “interface” and how to design surfaces “in between”. Through passing a practical based research approach they will reflect their ideas and the transfer of insights into 3D prototypes.

#### *Applying knowledge and understanding*

The students will learn how to transfer qualitative empirical data into rough paper prototypes, gain insights through materializing their ideas and through that gain feedback from others. In this way a more elaborated interface can evolve.

#### *Making judgments*

By testing the interface prototypes the students will judge the usage and adaption by users and analyze the outcome. By providing a Research-Through-Design-framework (Findeli, Jonas 2004) the students will integrate the user feedback in their research process and generate theoretical insights about their design.

#### *Communication skills*

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

#### *Learning skills*

Through the reflection of their process the students will learn about the participatory processes and methods as well as the advantages of a rapid prototyping through everyday materials.

### **Assessment**

Oral and Written:

- Oral, audiovisual and/or physical presentation of the prototypes (inside or outside their main design project)
- Critical discussion of the project, in particular related to the choice of interaction patterns and satisfaction of needs related to the intended user group
- In the end of the class every student or team should provide a Documentation about the overall process from the beginning to the end of the class (a template will be provided)

**Assessment language: English**

### **Evaluation criteria and criteria for awarding marks**

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

### **Required readings**

*Please insert list or specify if available for students in the reserve collection: <http://pro.unibz.it/rc/>*

- Findeli, Brouillet, Martin, Moineau, Tarrago (2008). "Research Through Design and Transdisciplinarity. A Tentative Contribution to the Methodology of Design Research" In: Focused. Current Design Research Projects and Methods. Mount Gurten, Bern Switzerland. Kap. 4, S. 67–91.
- Star, Griesemer (1989) "'Translations' and Boundary Objects", Jstor, Social Studies of Science, Vol. 19, No. 3, pp. 387-420
- Sanders (2006) "Design Serving People", Cumulus Working Papers, Publication Series G, University of Art and Design Helsinki
- Sanders (2002) "From User-Centered to Participatory Design Approaches" In: Design and the Social Sciences. J. Frascara (Ed.), Taylor & Francis Books Limited, 2002.
- Ehn (2008) "Participation in Design Things", Proceeding PDC '08 Proceedings of the 10th Anniversary Conference on Participatory Design 2008
- Wellman (2002) "Little Boxes, Glocalization, and Networked Individualism" in: M. Tanabe, P. van den Besselaar, T. Ishida (Eds.): Digital Cities, LNCS 2362, pp. 10-25, 2002. Springer-Verlag Berlin Heidelberg 2002

### **Supplementary readings**

- Jonas, (2004) "Forschung durch Design", Swiss Design Network, Symposium, HGK Basel 13.-14.5. 2004, S.27-33
- Fuad-Luke (2009) "Design Activism", Earthscan publisher
- Di Salvo (2009) "Design and the Construction of Publics", MIT
- Ehn (2009) "Design Things and Living Labs, Multiple ways to Design Research", Swiss Design Network