UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Laboratorio di Interaction Design

2526-2-F9201P214

Aims

The Interaction Design Laboratory course aims to train students to design interactions with interactive computer systems, in order to make the user experience rewarding and engaging. The goal of the course is therefore to provide the conceptual foundations, tools, and methodologies necessary to understand and approach user-centered design, from data collection to identify needs, to the analysis of different design alternatives, to prototyping and evaluation of the design solution, while also preparing students for an ethical and responsible design approach. The course follows a highly interactive teaching method that combines theoretical lessons and classroom exercises.

At the end of the course, students will:

1. have acquired a solid knowledge of the principles underlying good interaction design, gained awareness of ethical and accessible design approaches, acquired expertise in the operational tools for the practical development of user-centered prototypes (knowledge and understanding)
2. will be able to effectively approach the design and development of a user interface prototype that meets usability and UX requirements, adopting design strategies consistent with the needs of the target audience and the principles of ethical and responsible design (applying knowledge and understanding)
3. will develop a critical approach to the choice of design techniques through classroom exercises in which they will test the practical application of the various techniques learned in small working groups, in order to stimulate dialogue, mutual exchange, and teamwork skills, in preparation for the drafting of the final group project (making judgments).
4. will have the opportunity to strengthen their ability to effectively present and communicate the knowledge acquired through oral presentations and group discussion of classroom exercises at the end of each exercise. In addition, in preparation for the exam project, one exercise will be dedicated to reviewing the progress of the group work, allowing students to present their design approaches and the choices made for the construction of the exam prototype (communication skills).
5. will have assimilated the practical tools (prototyping and needs assessment techniques and data analysis methodologies) and theoretical tools (knowledge of the subject and main channels of access to the knowledge acquired, i.e., databases for scientific research, websites dedicated to training and information

on interaction design, texts and reference books) to independently build a path for further study and expansion of their knowledge on the topics covered (learning skills).

Contents

The course introduces the principles of interaction design and explores the techniques and methodologies needed to develop the various stages of a design cycle. The following topics will be discussed in particular:

- Practical concepts and tools for interaction design, usability, and user experience
- The principles and laws of interaction design
- Techniques for needs analysis, alternative design, prototyping, and evaluation
- Accessibility and inclusive design

Detailed program

Lectures:
Introduction to Interaction Design: the concepts of good and bad design; The concept of usability and user experience: usability objectives and UX models; Interaction design, UX, and usability: relationship; User needs; User-centered design; The principles and laws of Interaction Design; The design cycle (needs analysis, design of alternatives, prototyping, evaluation); Dark patterns, persuasive design, emotional design, nudges; Ethics for interaction design, accessibility, and inclusive design.

In addition to theoretical lectures, the course includes a number of exercises aimed at acquiring theoretical concepts applied directly in practice through a variety of exercises and activities:

Exercise topics:
Branding, marketing, and UX; Use of artificial intelligence in design; Research and ideation tools and activities such as market analysis, target analysis, journeys, flows; Personalization and customization; Gamification and UX; Metrics and KPIs for usability evaluation; Designing a design system

Prerequisites

Basic knowledge of Figma.

Teaching form

- 6 lessons lasting 2-3 hours, delivered in a lecture format at the beginning, encouraging student participation through interactive activities at the end of each lesson. All lessons are held in person.
- 5 lessons lasting 2-3 hours, delivered remotely (asynchronous).
- 10 exercises lasting 2-3 hours, conducted in an interactive classroom setting, individually and/or in groups.

Textbook and teaching resource

Reference texts:

- Sharp H., Rogers Y., Preece J. (2021) Interaction Design: Beyond Human-Computer Interaction. Apogeo
- Saffer D. (2007) Interaction Design. Creating Smart Applications and Ingenious Devices with Interaction Design. Pearson Education

Recommended supporting texts:

- Norman D (2013), The Design of Everyday Things. Basic Books
- Cooper A, Reimann R, and Cronin D (2007), About Face 3: The Essentials of Interaction Design. John Wiley & Sons, Inc., New York, NY, USA
- Norman D (2004). Emotional Design. Why We Love (or Hate) Everyday Things, Basic Books
- Other material and slides provided by the teachers.

Semester

Second semester

Assessment method

The assessment of the course includes:

- The development of a group project (max 2-3 people).
- Oral exam with critical discussion of the project and oral exam on the topics covered in the course (in class and in exercises).
- Group exercises carried out in class (*)

The group project serves to assess the ability to correctly implement design principles and techniques. The group project will be presented in the form of a short project work one week before the exam session. The grade obtained in the project is unique for the working group. The oral exam serves to assess individual preparation on the course content. The outcome of the oral exam, if sufficient, may therefore lead to an increase or decrease in the grade obtained with the group project. In the event of an unsatisfactory oral exam, it will not be necessary to develop a new project, but it will be possible to make changes to the project already completed and participate in a subsequent exam session.

(*) Group exercises in the classroom, if correctly performed, will allow for a 1 point increase in the final grade.

Office hours

At the end of the lesson or by appointment via email

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | REDUCED INEQUALITIES | SUSTAINABLE CITIES AND COMMUNITIES