
DEGREE CURRICULUM

# INTERACTION AND USABILITY

Coordination: GARRIDO NAVARRO, JUAN ENRIQUE

Academic year 2023-24

# INTERACTION AND USABILITY 2023-24

## Subject's general information

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| **Subject name** | INTERACTION AND USABILITY |
| **Code** | 102371 |
| **Semester** | 2nd Q(SEMESTER) CONTINUED EVALUATION |
| **Typology** | <table><tr><th>Degree</th><th>Course</th><th>Character</th><th>Modality</th></tr><tr><td>Bachelor's degree in Digital Interaction and Computing Techniques</td><td>1</td><td>COMMON/CORE</td><td>Attendance-based</td></tr></table> |
| **Course number of credits (ECTS)** | 6 |
| **Type of activity, credits, and groups** | Only examination |
| **Coordination** | GARRIDO NAVARRO, JUAN ENRIQUE |
| **Department** | COMPUTER ENGINEERING AND DIGITAL DESIGN |
| **Teaching load distribution between lectures and independent student work** | 40% lectures / 60% independent student work |
| **Important information on data processing** | Consult this link for more information. |
| **Language** | Castellano |

# INTERACTION AND USABILITY 2023-24

| Teaching staff | E-mail addresses | Credits taught by teacher | Office and hour of attention |
|---|---|---|---|
| GARRIDO NAVARRO, JUAN ENRIQUE | juanenrique.garrido@udl.cat | 0 | |

## Subject's extra information

Subject to be held during the second semester in the first course of the Degree in Digital Interaction and Computing Techniques.

It belongs to the Computer Science area, inside the “Basic Training” module.

## Learning objectives

- Know the basic concepts related to the Human-Computer Interaction.
- Understand the importance of creating usable interfaces.
- Learn methodologies for the development of user-centred interactive applications.
- Establish the relationship with Software Engineering.
- Ability to identify and analyze the aspects related to the user experience in real examples.
- Be able to design the interfaces of an interactive system based on users’ needs and the context of use.
- Know the main aspects of accessibility in ICT.

## Competences

Basic competences:

B01. That students have demonstrated to possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge coming from the vanguard of his/her field of study.

Transversal competences:

CT3. Acquire training in the use of new technologies and information and communication technologies.

CT5. Acquire essential notions of scientific thought.

General competences:

CG2. Design, develop, evaluate and guarantee the accessibility, ergonomics, usability and security of computer systems.

CG3. Use adequate hardware and software platforms to develop and execute interactive digital applications.

CG5. Know the basic subject areas and technologies needed to learn and develop new methods and technologies,

and those that help to adapt to new situations.

CG7. Solve problems through initiative, determination, independence and creativity.

CG8. Capacity for abstraction and critical, logical and mathematical reasoning.

Specific competences:

CE16. Capacity to design and evaluate person-computer interfaces that guarantee the usability of systems, services and computer applications.

CE17. Capacity to apply knowledge on design to propose and defend a design concept for an interactive system and use proper creative technologies to develop each project.

CE24. Capacity to understand the human factors involved in any interactive process between humans and technology, as well as being able to adequately apply them in the design of interactive products and services, and their interfaces.

## Subject contents

- Block I

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| Prototypes |
| History + IU, DCU, UX |
| Requirements Analysis |
| User Centered Design |
| Information Architecure |
| Human Factors |

Bloc II

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| Design Guides |
| UI Design |
| Accessibility |
| Accessibility Evaluation |
| Interaction Paradigms |

## Methodology

Exam-only mode.

## Development plan

Exam-only mode.

## Evaluation

- **Final Grade = (0.5 * Theory) + (0.5 * Practices) >= 5**
- **Theory** = ((0.5* First Partial) + (0.5 * Second Partial)) >= 5
    - First Partial (50% of theory) - Block I
    - Second Partial (50% of theory) - Block II
- **Practice** = Practice Project = 50% of the Final Grade
    - The project will be agreed with the students

**Retakes**

- If Theory < 5 = maximum grade 7.5
    - Theory exam (Blocks I and II)
- If Practice project < 5 = maximum grade 7.5
    - Re-delivery of the practice project with the corrections indicated by the teaching staff

## Bibliography

- Alan Dix, Janet Finlay, Gregory D. Abowd, Russell Beale. Human-Computer Interaction, Prentice Hall, ISBN-13:

978-0-13-046109-4 (2004)

-Don Norman. The Design of everyday Things. MIT Press

- Nielsen Norman group. https://www.nngroup.com/

- ux planet: uxplanet.org

- Material Design: material.io

- The World Wide Web. http://www.w3.org/

- curso-ipo.com

- https://mpiua.invid.udl.cat