

## 39823 - Person-Computer Interaction

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 39823 - Person-Computer Interaction

**Faculty / School:** 326 - Escuela Universitaria Politécnica de Teruel

**Degree:** 634 - Joint Programme in Computer Engineering - Business Administration

**ECTS:** 6.0

**Year:** 2

**Semester:** Second semester

**Subject type:** Compulsory

**Module:**

### 1. General information

In this subject the student will learn the technology and methodologies to be applied to design quality interactive interfaces. The accessibility of interfaces and the knowledge of standards, guidelines and regulations associated with the development of them are also subject of the subject.

The subject has an applied character. The student will learn the necessary concepts about specification, design and evaluation of interfaces and, above all, will learn to apply them in different environments and platforms.

The subject aligns with some of the SDGs, in particular:

Goal 10: Reduce inequality within and between countries (Target 10.2).

Goal 5: Achieve gender equality and empower all women and girls (Target 5.b).

### 2. Learning results

In order to pass this subject, the students shall demonstrate they has acquired the following results:

- Know the human factors related to Interactive Systems Interfaces.
- Know the relationship between computer and interaction and peripherals for interaction.
- Know the models, paradigms and techniques for interface design, prototyping and evaluation: Heuristics, Standards and Guidelines.
- Know interface implementation techniques. Know how to use tools for the creation of GUIs.
- Get to know Specific, Advanced and Mobile Interfaces.

### 3. Syllabus

- Introduction: usability, accessibility, user-centered design.
- Human Factors and their relationship to Interactive Systems Interfaces.
- Process model. Interface Design in Software Engineering
- Requirements analysis. Ethnographic analysis. Audience Study. Study of the competition. Objectives of the application. Usability objectives. Interaction devices.
- Interface design. Prototyping techniques. Task analysis. Interface design. Metaphors. Basic rules and principles . Mobile design. Web Design. Style guides.
- Evaluation techniques: evaluation with experts and with users. Norms and standards.
- Accessibility.
- Paradigms and interaction styles.

## 4. Academic activities

The learning process is based on continuous study and work from the first day of class, through the following activities:

- Learning concepts and methodologies for the analysis, design and evaluation of interfaces in the theoretical classes.
- The application of such knowledge in problem classes. In them students will play an active role.
- The development of a team project in practical classes. They will apply the proposed methodologies, the guidelines and recommendations seen, and learn the technologies necessary for the prototyping of the interfaces.

## 5. Assessment system

The subject does NOT have continuous assessment. The assessment of the subject has two parts: knowledge in a theoretical exam and knowledge in a practical exam.

The knowledge test in the theoretical exam will deal with the general knowledge of the subject worked in the theory classes and problems, both from the class material and from external sources that have been proposed in the classes and publicized in such a way that they are accessible.

The knowledge test in practical exam will be held on the same date as the previous one and will consist of the delivery of all materials produced as a result of the practical classes. Teachers may ask questions to ensure the originality and quality of the materials submitted. To help overcome this part of the subject, a calendar of voluntary and progressive delivery of these materials during the term will be programmed.

In order to pass the subject a minimum score of 5/10 must be obtained in each part.

- Weight of the theoretical part in the overall grade: 30%.
- Weight of the practical part in the overall grade: 70%.