

## 62950 - Digital interaction design

### Syllabus Information

**Academic Year:** 2019/20

**Subject:** 62950 - Digital interaction design

**Faculty / School:** 110 -

**Degree:** 562 - Master's in Product Development Engineering

**ECTS:** 4.5

**Year:** 1

**Semester:** Second semester

**Subject Type:** Optional

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

#### 1.2.Context and importance of this course in the degree

#### 1.3.Recommendations to take this course

### 2.Learning goals

#### 2.1.Competences

#### 2.2.Learning goals

#### 2.3.Importance of learning goals

### 3.Assessment (1st and 2nd call)

#### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

### 4.Methodology, learning tasks, syllabus and resources

#### 4.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. Lectures will introduce concepts and tools that will be used and contextualize the group work. In this assignment, students will design the user interface and all the interaction process of a digital device.

#### 4.2.Learning tasks

The course (4.5 ECTS: 112.5 hours) includes the following learning tasks:

- Lectures and problem-solving (30 hours).
- Practice session (22.5 hours).
- Group assignment (51 hours).
- Autonomous work and study (6 hours).
- Assessment (3 hours).

#### 4.3.Syllabus

The course will address the following topics:

1. Introduction to digital environments and mobile devices.
2. Design process for digital interaction.
3. Responsive design and adaptive design.
4. Design principles for specific elements in digital interfaces.
5. Technologies for the design of digital interfaces.
6. Tools for the evaluation of digital interaction.
7. Accessibility of digital systems.

#### **4.4.Course planning and calendar**

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the EINA website.

#### **4.5.Bibliography and recommended resources**

- Human-computer interaction / Alan Dix ... [et al.] . - 3rd ed. Harlow, England [etc.] : Pearson-Prentice Hall, 2004
- Rogers, Yvonne. Interaction design : beyond human-computer interaction / Rogers, Sharp, Preece . - 3rd ed. Chichester (United Kingdom) : John Wiley & Sons, 2011
- Shneiderman, Ben. Diseño de interfaces de usuarios : estrategias para una interacción persona-computadora efectiva / Ben Shneiderman, Catherine Plaisant ; traducción, Jesús Sánchez Cuadrado ; supervisión y revisión de la traducción , Jesús García Molina . - 4a. ed. Madrid : Pearson Educación, D.L. 2005
- Nielsen, Jakob. Usabilidad : diseño de sitios web / Jakob Nielsen ; traducción Santiago Fraguas Madrid [etc.] : Prentice Hall, D.L. 2000
- Stone, D . User Interface Design and Evaluation / D. Stone, C. Jarrett , M. Woodroffe & S. Minocha Morgan Kaufmann Publishers, 2005
- Beyer, Hugh. Contextual design : defining customer-centered systems / Hugh Beyer, Karen Holtzblatt San Francisco : Morgan Kaufmann Publishers, cop. 1998