



POLITÉCNICA

INTERNATIONAL
CAMPUS OF
EXCELLENCE

COORDINATION PROCESS OF
LEARNING ACTIVITIES
PR/CL/001



E.T.S. de Ingenieros
Informáticos

ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

103000694 - Human-computer interaction project

DEGREE PROGRAMME

10AQ - Eit Digital Master's Programme In Human Computer Interaction And Design

ACADEMIC YEAR & SEMESTER

2018/19 - Semester 2

Index

Learning guide

1. Description.....	1
2. Faculty.....	1
3. Prior knowledge recommended to take the subject.....	3
4. Skills and learning outcomes	3
5. Brief description of the subject and syllabus.....	4
6. Schedule.....	6
7. Activities and assessment criteria.....	8
8. Teaching resources.....	10
9. Other information.....	10

1. Description

1.1. Subject details

Name of the subject	103000694 - Human-computer interaction project
No of credits	6 ECTS
Type	Compulsory
Academic year of the programme	First year
Semester of tuition	Semester 2
Tuition period	February-June
Tuition languages	English
Degree programme	10AQ - Eit digital master's programme in human computer interaction and design
Centre	10 - Escuela Tecnica Superior de Ingenieros Informaticos
Academic year	2018-19

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Xavier Ferre Grau	5112	xavier.ferre@upm.es	W - 10:00 - 11:00 W - 13:00 - 14:00 Th - 10:00 - 14:00 Tutoring hours and office are not confirmed for the second semester. They will be updated afterwards

Elena Villalba Mora	5110	elena.villalba@upm.es	M - 12:00 - 15:00 F - 12:00 - 15:00 Tutoring hours and office are not confirmed for the second semester. They will be updated afterwards.
Cristian Moral Martos	5110	cristian.moral@upm.es	M - 12:00 - 15:00 W - 09:00 - 12:00 Tutoring hours and office are not confirmed for the second semester. They will be updated afterwards.
Loic Antonio Martinez Normand (Subject coordinator)	2303	loic.mnormand@upm.es	Tu - 13:00 - 15:00 W - 13:00 - 15:00 F - 13:00 - 15:00 Tutoring hours and office are not confirmed for the second semester. They will be updated afterwards.
Maria Pilar Herrero Martin	2305	pilar.herrero@upm.es	M - 12:00 - 15:00 W - 09:00 - 12:00 Tutoring hours and office are not confirmed for the second semester. They will be updated afterwards.

* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

3. Prior knowledge recommended to take the subject

3.1. Recommended (passed) subjects

- Introduction to human-computer interaction
- Design methods for human-computer interaction
- Programming of user interfaces

3.2. Other recommended learning outcomes

El plan de estudios Eit Digital Master's Programme In Human Computer Interaction And Design no tiene definidos otros conocimientos previos para esta asignatura.

4. Skills and learning outcomes *

4.1. Skills to be learned

CE14 - Capacidad para conceptualizar, diseñar, desarrollar y evaluar la interacción personaordenador de productos, sistemas, aplicaciones y servicios informáticos

CG05 - Aplicación de los métodos de resolución de problemas más recientes o innovadores y que puedan implicar el uso de otras disciplinas

CG08 - Comprensión amplia de las técnicas y métodos aplicables en una especialización concreta, así como de sus límites

4.2. Learning outcomes

RA2 - Apply techniques for designing and implementing prototypes of different fidelity levels

RA1 - Apply techniques for modelling the context of use

RA3 - Evaluate the usability and accessibility of prototypes

RA4 - Communicate and describe the results of the stages of the user-centred design process

* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

5. Brief description of the subject and syllabus

5.1. Brief description of the subject

This course is a **multi-disciplinary project** course with user cooperation in all phases of the project, from a general described theme to a specific and finished result. The project will be reported in different media. The project is expected to be integrated with the Business Development Lab course (part of the I&E minor).

The students will be assigned to **teams**. Each team will chose a subject for developing a project of an interactive system, applying the user-centred design process stages, under the supervision of one of the professors of the course. The teams will present in the classroom the status of their projects at different stages of the design process.

5.2. Syllabus

1. Project start
 - 1.1. Team selection
 - 1.2. Project subject area
2. Context of use
 - 2.1. Gathering information
 - 2.2. Modelling the context of use
 - 2.3. Oral presentation of context of use
3. Design of prototypes
 - 3.1. Designing the product concept
 - 3.2. Developing prototypes
 - 3.3. Oral presentation of prototype
4. Evaluation of prototypes
 - 4.1. Usability evaluation
 - 4.2. Usability evaluation
 - 4.3. Oral presentation of evaluation results

6. Schedule

6.1. Subject schedule*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Other face-to-face activities	Assessment activities
1	Course presentation. Outline of project schedule. Definition of teams. Project ideas Duration: 03:00 Lecture			
2	Seminar - project ideas Duration: 01:00 Additional activities			Presentation of project subject Group presentation Continuous assessment and final examination Duration: 02:00
3	Seminar - context of use - gathering Duration: 03:00 Additional activities			
4	Seminar - context of use - modelling Duration: 03:00 Additional activities			
5	Seminar - product concept Duration: 01:00 Additional activities			Presentation of context of use Group presentation Continuous assessment and final examination Duration: 02:00
6	Seminar - low fidelity prototypes Duration: 03:00 Additional activities			
7	Seminar - low fidelity prototypes Duration: 03:00 Additional activities			
8	Seminar - evaluation of low fidelity prototypes Duration: 01:00 Additional activities			Presentation of low fidelity prototype Group presentation Continuous assessment and final examination Duration: 02:00
9	Seminar - evaluation of low fidelity prototypes Duration: 03:00 Additional activities			
10	Seminar - decisions for second iteration (high fidelity) Duration: 01:00 Additional activities			Presentation of the evaluation of low fidelity prototypes Group presentation Continuous assessment and final examination Duration: 02:00

11	Seminar - High fidelity prototypes Duration: 03:00 Additional activities			
12	Seminar - High fidelity prototypes Duration: 03:00 Additional activities			
13	Seminar - evaluation of high-fidelity prototypes Duration: 01:00 Additional activities			Presentation of high fidelity prototype Group presentation Continuous assessment and final examination Duration: 02:00
14	Seminar - evaluation of high-fidelity prototypes Duration: 03:00 Additional activities			
15	Seminar - project closure Duration: 01:00 Additional activities			Presentation of the evaluation of the high fidelity prototype Group presentation Continuous assessment and final examination Duration: 02:00
16	Seminar - course conclusions Duration: 03:00 Additional activities			
17				

The independent study hours are training activities during which students should spend time on individual study or individual assignments.

Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

* The subject schedule is based on a previous theoretical planning of the subject plan and might go through experience some unexpected changes along throughout the academic year.

7. Activities and assessment criteria

7.1. Assessment activities

7.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
2	Presentation of project subject	Group presentation	Face-to-face	02:00	10%	/ 10	CE14
5	Presentation of context of use	Group presentation	Face-to-face	02:00	20%	/ 10	CG08 CE14
8	Presentation of low fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
10	Presentation of the evaluation of low fidelity prototypes	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
13	Presentation of high fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
15	Presentation of the evaluation of the high fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14

7.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
2	Presentation of project subject	Group presentation	Face-to-face	02:00	10%	/ 10	CE14
5	Presentation of context of use	Group presentation	Face-to-face	02:00	20%	/ 10	CG08 CE14
8	Presentation of low fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
10	Presentation of the evaluation of low fidelity prototypes	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
13	Presentation of high fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14

15	Presentation of the evaluation of the high fidelity prototype	Group presentation	Face-to-face	02:00	17.5%	/ 10	CG05 CG08 CE14
----	---	--------------------	--------------	-------	-------	------	----------------------

7.1.3. Referred (re-sit) examination

Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
Project - remaining phases not successfully passed	Group work	Face-to-face	04:00	100%	/ 10	CG05 CG08 CE14

7.2. Assessment criteria

Grading criteria

The projects will be evaluated during their iterative development during the course. Grading of students will be based on:

- Quality of the oral presentations (content, communication, slides)
- Quality of the intermediate and final results
- Ability to debate
- Active participation in class

Final evaluation

This course is based on the iterative development of an interactive system. Thus, the recommended evaluation is a continuous one during the semester. However students unable to attend the classes will have the opportunity of being evaluated in a final evaluation.

That final evaluation will consist on the same iterative development of a project, but without the requirement of attending the classes for seminars and presentations. But the milestones will be the same and in the same dates.

Extraordinary evaluation

The extraordinary evaluation exists for students unable to pass the course during the semester. For that extraordinary evaluation students will have to finish whatever milestones they haven't passed.

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
Interaction Design: Beyond human-computer interaction	Bibliography	Book by Rogers, Sharp & Preece. Available in Safary Books
Moodle	Web resource	Moodle course (URL will be available before starting the semester) used to enable communication and delivery of milestones.

9. Other information

9.1. Other information about the subject

This course is based on teamwork. The number of students per team and the number of teams will be defined at the start of the course. Each team will have one professor acting as project supervisor.