ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

103000692 - Evaluation of interactive systems

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....2
4. Skills and learning outcomes 2
5. Brief description of the subject and syllabus....3
6. Schedule....5
7. Activities and assessment criteria....7
8. Teaching resources....8

1. Description

1.1. Subject details

Name of the subject	103000692 - Evaluation of interactive systems
No of credits	3 ECTS
Type	Compulsory
Academic year ot 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 *
Elena Villalba Mora (Subject coordinator)	5110	elena.villalba@upm.es	M - 12:00 - 15:00 F - 12:00 - 15:00 Please, ask for an appointment by email.
Oscar Dieste Tubio	6203	oscar.dieste@upm.es	M - 12:00 - 15:00 F - 12:00 - 15:00 Please, ask for an appointment by email.

Cristian Moral Martos	5110	cristian.moral@upm.es	M - 12:00 - 15:00 F - 12:00 - 15:00 Please, ask for an appointment by email.

* 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

- Design methods for human-computer interaction

- Introduction to human-computer interaction

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

CB09 - Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan¿ a públicos especializados y no especializados de un modo claro y sin ambigüedades

CE02 - Capacidad para la planificación estratégica, elaboración, dirección, coordinación, y gestión técnica y económica de proyectos en los ámbitos de la ingeniería informática relacionados, entre otros, con sistemas, aplicaciones, servicios, redes, infraestructuras o instalaciones informáticas y centros o factorías de desarrollo de software, respetando el adecuado cumplimiento de los criterios de calidad y medioambientales y en entornos de trabajo multidisciplinares.

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

CE16 - Habilidad para hacer conexiones entre los deseos y necesidades del consumidor o cliente y lo que la tecnología puede ofrecer

CG01 - Capacidad de organizar y planificar

CG02 - Capacidad de gestionar la información

4.2. Learning outcomes

RA3 - Evaluate the usability and accessibility of prototypes

RA31 - Plan and perform evaluation of prototypes

RA32 - Understand and carry experiments to evaluate interactive systems

* 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 teaches methods to perform usability evaluation and to statistically analyse the results. Different evaluation methods will be introduced for different tasks, user groups, and performed in a lab environment as well as in field.

5.2. Syllabus

1. Introduction
    1.1. Definition of evaluation
    1.2. Types of evaluation
2. Inspection methods
    2.1. Inspection definition and objectives
    2.2. Heuristics evaluation
    2.3. Cognitive Walkthrough Method
    2.4. Pluralistic Usability Walkthrough
3. Interrogation techniques
    3.1. Interviews
    3.2. Questionnaires
    3.3. Surveys
4. Usability test
    4.1. Definition and classification of usability tests
    4.2. Planning a usability test
    4.3. Recruiting participants
    4.4. Running a usability test
    4.5. Analysis and reporting
5. Experimental Design
6. Quantitative analysis and reporting
    6.1. Statistical analysis
    6.2. Reporting

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	**1. Introduction** Duration: 01:00 Lecture **2.1 Inspection methods. 2.2 Heuristics evaluation** Duration: 02:00 Lecture			
2	**2.2 Understanding Heuristics** Duration: 02:00 Additional activities			**Presentation of heuristics evaluation** Group presentation Continuous assessment Duration: 02:00
3	**3. Interrogation techniques** Duration: 01:00 Lecture **4.1 Definition and classification of usability tests. 4.2 Planning a usability test** Duration: 02:00 Lecture			
4	**4.2 Planning a usability test** Duration: 02:00 Additional activities **4.3 Recruiting participants. 4.4 Running a usability test.** Duration: 01:00 Additional activities			
5	**Analysing and reporting a usability test** Duration: 02:00 Additional activities			**Assessment of usability test report** Group presentation Continuous assessment Duration: 01:00
6	**5. Experimental Desing** Duration: 03:00 Lecture			
7	**6.1 Statistical analysis. 6.2 Reporting** Duration: 02:00 Lecture			**Assessment Experimental Design and analysis** Group presentation Continuous assessment Duration: 02:00
8	**Course closure** Duration: 02:00 Lecture			**Active participation in class and fora** Other assessment Continuous assessment Duration: 00:00

9				
10				
11				
12				
13				
14				
15				
16				**Final written exam** Written test Final examination Duration: 03:00
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 theorical planning of the subject plan and might go to 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 heuristics evaluation	Group presentation	Face-to-face	02:00	25%	/ 10	CE16 CB09 CE14
5	Assessment of usability test report	Group presentation	Face-to-face	01:00	35%	/ 10	CB09 CG01 CE02 CE14 CG02 CE16
7	Assessment Experimental Design and analysis	Group presentation	Face-to-face	02:00	35%	/ 10	CE16 CB09 CE14
8	Active participation in class and fora	Other assessment	Face-to-face	00:00	5%	/ 10	CG02 CE16 CB09 CG01 CE02 CE14

7.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
16	Final written exam	Written test	Face-to-face	03:00	100%	5 / 10	CG02 CE16 CB09 CG01 CE02 CE14

7.1.3. Referred (re-sit) examination

Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
Final written exam	Written test	Face-to-face	03:00	100%	5 / 10	CG02 CE16 CB09 CG01 CE02 CE14

7.2. Assessment criteria

Quality of the oral communication skills.

Ability to debate.

Ability to understand concepts.

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
Moodle	Web resource	https://moodle.upm.es/titulaciones/oficiales
Interaction Design: Beyond Human-Computer Interaction.	Bibliography	Helen Sharp, Yvonne Rogers, Jenny Preece. 3ª Edición. John Wiley & Sons, 2011.
Usability Engineering	Bibliography	Jakob Nielsen. AP Professional, 1993.
EN 301 549 Accessibility requirements suitable for public procurement of ICT products and services in Europe	Bibliography	CEN, CENELEC, ETSI. 2014. Disponible en: http://www.etsi.org/deliver/etsi_en/301500_301599/301549/01.01.01_60/en_301549v010101p.pdf