



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

103000872 - Evaluation Of Interactive Systems

DEGREE PROGRAMME

10AZ - Master Universitario En Innovación Digital

ACADEMIC YEAR & SEMESTER

2021/22 - Semester 2

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1. Description

1.1. Subject details

Name of the subject	103000872 - Evaluation Of Interactive Systems
No of credits	3 ECTS
Type	Optional
Academic year of the programme	First year
Semester of tuition	Semester 2
Tuition period	February-June
Tuition languages	English
Degree programme	10AZ - Master Universitario en Innovación Digital
Centre	10 - Escuela Tecnica Superior De Ingenieros Informaticos
Academic year	2021-22

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Cristian Moral Martos	5110	cristian.moral@upm.es	M - 10:00 - 14:00 F - 10:00 - 12:00 Please, ask for an appointment by email.
Elena Villalba Mora (Subject coordinator)	5110	elena.villalba@upm.es	M - 10:00 - 12:00 W - 10:00 - 12:00 F - 10:00 - 12:00 Please, ask for an appointment by email.

Oscar Dieste Tubio	6203	oscar.dieste@upm.es	Tu - 18:00 - 20:00 W - 18:00 - 20:00 Th - 18:00 - 20:00 Please, ask for an appointment by email.
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* 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

3.2. Other recommended learning outcomes

The subject - other recommended learning outcomes, are not defined.

4. Skills and learning outcomes *

4.1. Skills to be learned

CB07 - Que los estudiantes sepan aplicar los conocimientos adquiridos y su capacidad de resolución de problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio

CE-DIPO02 - Capacidad para evaluar la interacción persona-ordenador de productos y servicios de alto valor innovador

4.2. Learning outcomes

RA42 - Understand and carry experiments to evaluate interactive systems

RA41 - Plan and perform evaluation of prototypes with different fidelity levels

RA40 - Evaluate the usability of prototypes

* 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, experimental design 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 to evaluation of interactive systems
2. Inspection methods
3. Interrogation techniques
4. Usability test
5. Experimental design. Introduction to empirical research
6. Statistical analysis

6. Schedule

6.1. Subject schedule*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Distant / On-line	Assessment activities
1	1. Introduction Duration: 02:00 2.1 Inspection methods. 2.2 Heuristics evaluation Duration: 02:00		1. Introduction Duration: 02:00 2.1 Inspection methods. 2.2 Heuristics evaluation Duration: 02:00	
2	2.2 Understanding Heuristics Duration: 02:00		2.2 Understanding Heuristics Duration: 02:00	Presentation of inspection evaluation Continuous assessment Presential Duration: 02:00
3	3. Interrogation techniques Duration: 02:00 4.1 Usability tests Duration: 02:00		3. Interrogation techniques Duration: 02:00 4.1 Usability tests Duration: 02:00	
4	4.2 Planning, analysing and reporting a usability test Duration: 02:00		4.2 Planning, analysing and reporting a usability test Duration: 02:00	
5				Assessment of usability test Continuous assessment Presential Duration: 02:00
6	5. Experimental design. Introduction to empirical research Duration: 02:00		5. Experimental design. Introduction to empirical research Duration: 02:00	
7	6 Statistical analysis Duration: 02:00		6 Statistical analysis Duration: 02:00	
8	6 Statistical analysis Duration: 02:00		6 Statistical analysis Duration: 02:00	
9				Assessment experimental design and analysis Continuous assessment Presential Duration: 02:00

10				
11				
12				
13				
14				
15				
16				Final written exam Final examination Presential Duration: 03:00
17				

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 schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

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 inspection evaluation		Face-to-face	02:00	20%	/ 10	CE-DIPO02 CB07
5	Assessment of usability test		Face-to-face	02:00	30%	/ 10	CE-DIPO02 CB07
9	Assessment experimental design and analysis		Face-to-face	02:00	50%	/ 10	CE-DIPO02

7.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
16	Final written exam		Face-to-face	03:00	100%	5 / 10	CE-DIPO02 CB07

7.1.3. Referred (re-sit) examination

Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
Final written exam		Face-to-face	03:00	100%	5 / 10	CE-DIPO02 CB07

7.2. Assessment criteria

In the evaluation activities, the following criteria is taken into account: 1) Quality of the oral communication skills; 2) Ability to debate; and 3) Ability to understand concepts.

In this second semester of the academic year 2020-21, academic activities are scheduled to be face to face, unless due to the COVID-19 situation we needed to change into online. In that scenario, face to face evaluation activities will be performed online through videoconferences.

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.
Basics of Software Engineering Experimentation	Bibliography	http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.707.5949&rep=rep1&type=pdf

9. Other information

9.1. Other information about the subject

This course contributes to the objectives 4 and 10 of the UN Sustainable Development Goals.

Note 1: please, always ask for an appointment before visiting a professor.

Note 2: The current COVID-19 pandemic situation restricts the capacity of the classrooms in the School. Depending on the number of enrolled students it might be necessary to split the class in two groups that will come to the School in alternate days. The School classrooms have teleconference equipment that enables remote participation in the class. In this situation some students will be in the classroom (column "Distant / On-line" in the

schedule) and other students will connect remotely (column "face-to-face" in the schedule). If the pandemic situation improves and the University is allowed to use the classrooms at their full capacity, then all students will be able to attend the face to face sessions together. If the situation get worse, all classes would be online.