



Universitat de Lleida

DEGREE CURRICULUM

USER EXPERIENCE

Coordination: SAYAGO BARRANTES, SERGIO

Academic year 2021-22

Subject's general information

Subject name	USER EXPERIENCE			
Code	102383			
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's degree in Digital Interaction and Computing Techniques	2	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRALAB	TEORIA	
	Number of credits	3	3	
	Number of groups	1	1	
Coordination	SAYAGO BARRANTES, SERGIO			
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING			
Teaching load distribution between lectures and independent student work	<p>According to the academic framework of bachelor's degrees of the EPS:</p> <ul style="list-style-type: none"> - 1 ECTS = 25 hours; 6 ECTS = 150 hours - 40% (60h) of in-class work and 60% (90h) of autonomous work <p>This distribution of hours in this course is as follows:</p> <ul style="list-style-type: none"> - In-class work: theory (28h) + laboratories (28h) = 56h + 4 hours of exams = 60h - Independent student's work: project (65h) + study (25h) = 90h 			
Important information on data processing	Consult this link for more information.			
Language	English, Catalan and Spanish			
Distribution of credits	See type of activity, credits, and groups			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
PROFESSOR PENDENT ASSIGNAR		3	
SAYAGO BARRANTES, SERGIO	sergio.sayago@udl.cat	3	Make an appointment via e-mail. Office 12 Campus Igualada (Pla de la Massa) / Online via videoconference

Subject's extra information

User Experience deals with instrumental and non-instrumental aspects of technology use. User Experience is a mandatory course of 6 ECTS. User Experience is held during the second semester of the second year of the Bachelor's degree in Digital Interaction and Computing Techniques (GTIDIC).

GTIDIC aims to train qualified professionals in the computing field with a very practical side, giving special emphasis to the design and implementation of interactive applications. The graduates will acquire solid programming knowledge, focusing on mobile and web applications, Internet technologies, administration tools and security systems, and interface design and development.

User Experience follows up on Interaction and Usability, which provides students with an introduction to Human-Computer Interaction. The main aim of User Experience is to train qualified professionals in the field of UX Research (and also *UX Writer*). To achieve this objective, this course is conducted within the context of an agile software development integrated project, which is carried out in four courses: Innovation, Mobile Development, and Specification and Analysis of Interactive Systems.

Learning objectives

1. To consolidate the development of interactive systems by following a User Centred Design methodology
2. To be able to apply techniques of participatory design at early phases of systems development
3. To understand and create user profiles related to an interactive system
4. To design the Information Architecture of an interactive system
5. To be able to apply interaction patterns while designing user interfaces
6. To be able to evaluate the usability and user experience of interactive systems

Competences

According to the table of competences of the GTIDIC (<https://ja.cat/zvyK4>):

Basic competences

CB3. That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.

Transversal competences

CT3. Acquire training in the use of new technologies and information and communication technologies.

CT6. Apply the gender perspective to the tasks of the professional field

General competences

CG1. Capacity to conceive, plan and develop projects in the field of ICT

CG2. Capacity to design, develop, evaluate and ensure the accessibility, ergonomics, usability and security of computer systems

CG4. Capacity to use software engineering methods in the development of interactive computer applications.

CG9. Capacity to analyze and synthesize

Specific competences

CE3. Basic knowledge of the use and programming of computers, operating systems and databases, and their use in the development of interactive applications.

CE6. Capacity to design, develop, select and evaluate applications and computer systems, ensuring its reliability, security and quality.

CE10. Capacity to analyse, design, build and maintain safe and efficient applications, choosing the most suitable paradigm and programming languages.

CE13. Knowledge and application of the characteristics, functionalities and structure of the databases, that allow their suitable use, and the design and the analysis and implementation of interactive applications based on them.

CE15. Knowledge and application of the principles, methodologies and life cycles of software engineering

CE16. Capacity to design and evaluate person-computer interfaces that guarantee the usability of systems, services and computer applications

CE25. Being able to analyze, organize, label and visualize the structure that defines the interaction with digital content, through the application of information architecture methods, techniques and tools that facilitate accessibility

CE26. Knowing how to apply the principles and standards of accessibility and universal design of the main digital products and services to design experiences that guarantee equal opportunities among their users.

Subject contents

- Participatory techniques
- User profiles
- Interactive prototyping
- Fundamentals of Information Architecture
- Interaction patterns

Methodology

Methodology	Theory	Laboratories	Independent student's work
Lectures	X		
Integrated project in laboratories		X	
Readings (integrated project and lectures)			X
Integrated project (at home)			X
Study (exams)			X

Plenary (theory) and laboratory sessions will be conducted face-to-face, unless the academic authorities at the UdL

indicate that these activities must be conducted virtually.

Integrated project

The laboratories are carried out within the context of an integrated project. This project is conducted in four courses: Innovation, Mobile Development, Specification and Analysis of Interactive Systems, and this course.

The integrated project aims to have students work in an agile software development project, which is designed to set up an start-up by designing and developing an mobile app. The project also aims to enable students to develop important skills and competences, such as being able to work in teams, present ideas in public, and team organization.

Development plan

Week	Dates	Theory	Labs	Comments
1	8 Feb - 9 Feb	T1. Relevance of UX T2. Inclusivity	P1. Some introductory aspects	
2	15 Feb - 16 Feb	T3. Data gathering T4. Data analysis	P1 (cont.)	Submission P1 20 Feb 23.55
3	22 Feb - 23 Feb	T5. Some aspects of UX design	P2. Definition of the UX of the game	
4	1 Mar - 2 Mar	T5 (cont.)	P2 (cont.)	Submission P2 6 March 23.55
5	8 Mar - 9 Mar	T5 (cont.)	P3. Definition of the IA of the game	
6	15 Mar - 16 Mar	T6. Prototyping	P3 (cont.)	Submission P3 20 March 23.55
7	22 Mar - 23 Mar	T7. Evaluation	P4. Low-fidelity prototype	
8	29 Mar - 30 Mar	Mock-up exam_1	P4 (cont.)	Submission P4 3 April 23.55
9	5 Apr - 6 Apr	EXAMS		EXAM (T1-T7)
10	19 Apr - 20 Apr	P5. Iteration 1 (design + evaluation)	HOLIDAYS	
11	26 Apr - 27 Apr	T8. UX in practice	P5 (cont.)	Submission P5 1 May 23.55
12	3 May - 4 May	P6. Iteration 2 (design + evaluation)	P6 (cont.)	
13	10 May - 11 May	Invited talk	P6 (cont.)	Submission P6 15 May 23.55
14	17 May - 18 May	T9. Future aspects	P7. Iteration 3 (design + evaluation)	
15	24 May - 25 May	P7 (cont.)	P7 (cont.)	Submission P7 29 May 23.55
16	31 May - 1 Jun	EXAMS		EXAM (T8, invited talk, T9)
17	7 Jun - 8 Jun	EXAMS		

18	14 Jun - 15 Jun	Office hours		
19	21 Jun - 22 Jun	RETAKES		
20	28 Jun-29 Jun	RETAKES		

The development plan of the integrated project is available at the Campus Virtual.

Evaluation

The evaluation assessment and their relationship with the learning objectives and specific competences are listed below:

Instrument	Learning objectives	Specific competences
Integrated project	All	6-15-16-25-26
Exams	All	6-15-16-25-26

Continuous evaluation
<p>Final Grade (FG) = Labs * 0.5 + Theory * 0.5, FG >= 5</p> <ul style="list-style-type: none"> • Labs (50% of the FG) >= 5 <ul style="list-style-type: none"> ◦ (30% of the FG): <u>Labs</u> <ul style="list-style-type: none"> ▪ (P1 + P2 + P3 + P4 + P5 + P6 + P7) / 7 ◦ (20% of the FG) <u>Integrated Project</u> <ul style="list-style-type: none"> ▪ Presentation (10%) ▪ Progress and management (10%) • Theory (50% of the FG) >= 5 <ul style="list-style-type: none"> ◦ (30% of the FG) <u>First exam</u>. 2h. Without notes. <ul style="list-style-type: none"> ▪ Observation: the final mark of the first exam will be the MAX (mock-up_exam_1, first exam) ◦ (20% of the FG) <u>Second exam</u>. 2h. Without notes.
<p>Retakes - minimum grade = 5, maximum grade = 7.5</p> <ul style="list-style-type: none"> • Retakes are not for getting a higher FG • If Laboratories < 5: Submission of all labs • If Theory < 5: <ul style="list-style-type: none"> ◦ <u>Final exam</u>. 2 hours.

Assessment activities, except Research papers, are conducted face-to-face, unless the academic authorities at the UdL indicate that these activities must be virtual.

Integrated project

The integrated project corresponds to 20% of the FG. It consists of two parts:

- presentation. Public presentation (10%)
- evolution and management. We will assess the progress of the teams (10%)

The grade of the integrated project will be the same for all the courses.

At the end of the course, the students will be provided with a summary report with information regarding their progress in the project.

If a student is not enrolled in all courses, the student will be evaluated according to his or her work in the courses in which s/he is enrolled. Thus, it is possible to carry out the project without being enrolled in the four courses.

If a group splits up, the grades will be kept for those activities that have already been assessed, and the members will carry on working on the project in different groups by drawing on the common aspects

Bibliography

[Contextual design : design for life / Karen Holtzblatt, Hugh Beyer](#)

[The Design of everyday things / Don Norman](#)

[Designing interactions / Bill Moggridge](#)

[Designing the user interface : strategies for effective human-computer interaction / Shneiderman, Plaisant, Cohen, Jacobs, Elmqvist](#)

[Experience design : technology for all the right reasons / Marc Hassenzahl](#)

[The human-computer interaction handbook : fundamentals, evolving technologies, and emerging applications / edited by Julie A. Jacko](#)

[Interaction design : beyond human-computer interaction / Helen Sharp, Jennifer Preece, and Yvonne Rogers](#)

[Studies in conversational UX design / de Robert J. Moore, Margaret H. Szymanski, Raphael Arar, Guang-Jie Ren](#)

[The Conversational Interface Talking to Smart Devices Michael McTear, Zoraida Callejas, David Griol](#)

[Wired for speech : how voice activates and advances the human-computer relationship / Clifford Nass and Scott Brave](#)

[Research methods in human-computer interaction / Jonathan Lazar, Jinjuan Heidi Feng, Harry Hochheiser](#)

[Information architecture : for the web and beyond / Louis Rosenfeld, Peter Morville, and Jorge Arango](#)