



DEGREE CURRICULUM

USER-CENTERED DESIGN

Coordination: GRANOLLERS SALTIVERI, ANTONI

Academic year 2016-17

Subject's general information

Subject name	USER-CENTERED DESIGN			
Code	102026			
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Typology	Modality
	Bachelor's Degree in Computer Engineering	3	COMPULSORY	Attendance-based
ECTS credits	6			
Groups	1GG			
Theoretical credits	2			
Practical credits	4			
Coordination	GRANOLLERS SALTIVERI, ANTONI			
Department	INFORMATICA I ENGINYERIA INDUSTRIAL			
Teaching load distribution between lectures and independent student work	6 ECTS = 25x6 = 150 hours 40% -> 60 classroom hours 60% -> 90 hours of autonomous student work			
Important information on data processing	Consult this link for more information.			
Language	English			
Distribution of credits	All the subject is done by one teacher			
Office and hour of attention	To offer best flexibility, I have no attetion schedule. Students can conact direct to me by e-mail to arrange a meeting.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
GRANOLLERS SALTIVERI, ANTONI	antoni.granollers@udl.cat	7,2	Send an e-mail to the teacher

Learning objectives

- Continuation and achievement of the knowledge acquired on "Human Computer Interaction" subject (2nd course)
- Deeping on the main concepts and methodologies that establish the User Centered Design methodology into Human-Computer Interaction discipline.
- Special emphasis on the main techniques that enable system designers to follow UCD methodologies for developing interactive systems and User Interfaces
- The subject will be mainly PRACTICAL

Competences

Strategic Competences of the UdL

- **CT2.** Mastering a foreign language, especially English.
- **CT3.** Training Experience in the use of the new technologies and the information and communication technologies.

Transversal skills

- **EPS11.** Ability to understand the user's needs expressed in non-technical language.

Skills training module specific technology. Information Technology

- **GII-TI1.** Ability to understand the environment of an organization and its needs in the Information and Communications Technology context.
- **GII-TI3.** Ability to use user-centric methodologies and development organization, assessment and management based applications and Information Technology to ensure its accessibility, ergonomics and usability.
- **GII-TI5.** Ability to select, deploy, integrate and manage Information Systems that meet the needs of the organization, with the criteria identified cost and quality.
- **GII-TI6.** Ability to conceive systems, applications and network technologies based services, including Internet, web, e-commerce, multimedia, interactive services and mobile computing.

Subject contents

- Introduction
- Interviews & surveys
- User profiles
- Information Architecture
- Task Analysis
- Interaction Patterns
- Multiculturality & Internacionalitization

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Methodology

The course is developed as follows:

- There are **no middle or small groups**, that means that all the classes are carried on with the same students.
- The course is divided in a series of topics related with UCD techniques.
- Each topic will be presented by the teacher, then the students (individually or in pairs) will work on this technique.
- At the end of every topic every student or pair will present to the rest what they have done, enabling a discussion.
- Every topic will spend 3-4 two-hour classes (see the schedule)
- A project idea will be delivered at the beginning to provide the same scenario to work on.

Development plan

Grau en Enginyeria Informàtica (UdL) course 2016-17 User Centered Design			
week 1	09 Feb	Explanation of the subject and UCD review Placement test - Groups formation - Design Thinking (The Wallet Project)	
	10 Feb	Design Thinking - Relay ideation (concept sheets) Additionally: interview and a survey	
week 2	16 Feb	Requirements & Design (from D. Thinking) presentation	
	17 Feb	User profiles Empathy Maps. Developing and discussion Scenarios - User Stories	
week 3	23 Feb	User profiles + Empathy Maps + Scenarios presentation	
	24 Feb	Information Arquitecture Card Sorting	
week 4	02 Mar	Festa Institucional EPS	
	03 Mar	Information Arquitecture: Presentation of card sorting results	
week 5	09 Mar	Start the prototype (Justinmind)	
	10 Mar	Start the prototype (Justinmind)	
week 6	16 Mar	Interaction Design Patterns Prototype	
	17 Mar	Prototype	
week 7	23 Mar	Prototype review	
	24 Mar	Prototype alfa version Correspondence with user profiles, Scenarios, IA and UI patterns used	
week 8	30 Mar	group-crossed Expert Evaluation preparation and development	
	31 Mar	Expert Evaluation delivery Evaluator's feedback to the designers --> REFINE YOUR PROTOTYPES Stephen Brewster conference	
week 9	Week of Evaluation Activities (NO exam in this subject)		
Easter			
week 10	20 Apr	Review DCU process Evaluation with Users: explanation è UX Design activity topics (readings for next activity)	- refine your prototype - recruit participants - reserve usabilityLAB - User
	21 Apr	Evaluation with Users: practical session in UsabiliLAB	
week 11	27 Apr		
	28 Apr	Multiculturality & Internationalization	
week 12	04 May	How to prepare the usability reports: Common Industry Format (CIF) for usability test reports	
	05 May	Evaluations with disabled people	

week 13	11 May		evaluations
	12 May	UX Design: Presentation in class	
week 14	18 May	UX Design: Presentation in class	
	19 May	UX Design: Presentation in class	
week 15	25 May	Final Project Presentation (+ Evaluation with Users delivery)	
	26 May	Final Project Presentation (+ Evaluation with Users delivery)	

Evaluation

Group Activities	85%	GR1	10%	Design Thinking - Relay ideation
		GR2	10%	User profiles
		GR3	10%	Information Architecture
		GR4	10%	Prototype alfa version
		GR5	20%	Expert Evaluation
		GR6	10%	UX Design
		GR7	20%	Evaluation with Users
		GR8	10%	Final Report & Presentation
June Exam	15%	Parcial1		
FINAL MARK= Group Activities * 0.85 + June Exam * 0.15				

IMPORTANT:

- ALL activities and Exam are mandatory
- Minimum mark for passing the subject FINAL MARK = 5
 - 4.9 is not 5
 - Not Presented = 0
- Every activity or exam wich mark is below 4 must be resubmitted
 - 3.9 is not 4
 - Not Presented = 0

Then, for passing the course **ALL the activities must reach 4 points**. Those that haven't achieved it have the chance to resubmit the activity up to the last day of "tutories week" (in this case, the mark for every resubmitted activity will be 80% of its final review)

Bibliography

- **Webs**
 - <http://www.interaction-design.org/books/hci.html>
 - <http://www.grihotools.udl.cat/mpiuu>
- **Books**

- **Understanding Your Users. A practical guide to user requirements** by C. Courage & K. Baxter. Elsevier (2005)
- **Human-Computer Interaction** (3rd Edition) by Alan Dix, Janet E. Finlay, Gregory D. Abowd and Russell Beale (Dec 20, 2003)
- **Designing Interactions** by Bill Moggridge (October 1, 2007. ISBN-10: 0262134748
- **100 Things Every Designer Needs to Know About People** (Voices That Matter) by Susan Weinschenk (April 24, 2011). ISBN-10: 0321767535
- **Designing Interfaces** by Jenifer Tidwell (January 6, 2011). ISBN-10: 1449379702
- **User-Centered Design: A Developer's Guide to Building User-Friendly Applications** by Travis Lowdermilk (April 11, 2013)
- **Web articles**
 - A large web articles on: <https://delicious.com/tgranollers/GEInformàtica-UCD>