



Universitat de Lleida

DEGREE CURRICULUM

USER-CENTERED DESIGN

Coordination: GRANOLLERS SALTIVERI, ANTONI

Academic year 2017-18

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
- Participatory techniques for requirements
- User profiles
- Information Architecture
- Interaction Patterns
- Multiculturality & Internacionalitization
- User eXperience (UX) Design
- Usability evaluation:
 - experts evaluation
 - evaluation with users

- professional reports

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 2017-18 User Centered Design		
week 1	07 Feb	Explanation of the subject and UCD review Placement test - Groups formation - Design Thinking (The Wallet Project)
	08 Feb	Design Thinking (concept sheets) User Profiles (personas) Scenarios (user stories)
week 2	14 Feb	Justinmind explanation DT+UP+S doubts
	15 Feb	DT+UP+S presentation
week 3	21 Feb	Information Architecture (Card Sorting)
	22 Feb	Prototype development with Justinmind
week 4	28 Feb	Interaction Design Patterns
	01 Mar	Prototype development with Justinmind
week 5	07 Mar	Prototype development with Justinmind IA doubts
	08 Mar	Information Architecture: Presentation of card sorting results
week 6	14 Mar	FINISHING the Prototype development with Justinmind
	15 Mar	Prototype alpha version Correspondence with user profiles, Scenarios, IA and UI patterns used
week 7	21 Mar	group-crossed Expert Evaluation preparation and development
	22 Mar	University Holiday
Easter		
week 8	04 Apr	1st evaluation: Expert Evaluation delivery Evaluator's feedback to the designers --> modify your prototypes
	05 Apr	Evaluation with Users: explanation --> UX Design activity topics (readings for individual activity)
week 9	Week of Evaluation Activities (NO partial exam in this subject)	
week 10	18 Apr	Evaluation with Users: practical session in UsabiliLAB
	19 Apr	Evaluation with Users: userZoom
week 11	25 Apr	How to prepare the usability reports: Common Industry Format (CIF) for usability test reports
	26 Apr	University Holiday
week 12	02 May	Review of evaluation progress
	03 May	Multiculturality & Internationalization
week 13	09 May	Review of evaluation progress
	10 May	Evaluations with disabled people

week 14	16 May	UX Design: Presentation in class
	17 May	UX Design: Presentation in class
week 15	23 May	Presentation of Final Evaluation with Users (laboratory + userZom)
	24 May	Presentation of Final Evaluation with Users (laboratory + userZom)

Evaluation

Group Activities	85%	Act1	10%	Design Thinking (concept sheets) User Profiles (personas) Scenarios (user stories)
		Act2	10%	Information Architecture
		Act3	15%	Prototype alpha version
		Act4	15%	Expert Evaluation
		Act5	10%	Prototype enhanced
		Act6	10%	UX Design
		Act7	30%	Evaluation with Users
June Exam	15%			
FINAL MARK= Group Activities * 0.85 + June Exam * 0.15				

IMPORTANT:

- **ALL activities and Exam are mandatory**
- Every activity or exam which mark is below 4 must be recovered
 - 3.9 is not 4
 - Not Presented = 0
- **For passing the subject ==> FINAL MARK >= 5**
 - 4.9 is not 5

Then, for passing the course **ALL the activities must reach 4 points.**

Classes are "face-to-face", if attendance in class is lower than 80%, final mark will be reduced 20%

Suspended activities may be resubmitted until the last day of "tutorials 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>