

BASIC DETAILS:

Subject:	INTERACCIÓN PERSONA COMPUTADOR		
Id.:	31376		
Programme:	GRADUADO EN DISEÑO Y DESARROLLO DE VIDEOJUEGOS. 2013 (BOE 28/03/2014)		
Module:	DISEÑO DE VIDEOJUEGOS		
Subject type:	OBLIGATORIA		
Year:	3	Teaching period:	Segundo Cuatrimestre
Credits:	6	Total hours:	150
Classroom activities:	65	Individual study:	85
Main teaching language:	Inglés	Secondary teaching language:	Castellano
Lecturer:	ARCEGA RODRIGUEZ, LORENA (T) HERNANDEZ ALONSO, JUAN JOSE	Email:	larcega@usj.es jjhernandez@usj.es

PRESENTATION:

Human-Computer Interaction (HCI) is the study of the principles and methods with which one builds effective interfaces for users. This course will introduce computer science students to the theory and practice of developing user interfaces. Practical concerns will be balanced by discussion of relevant theory from the literature of computer science, cognitive psychology, and industrial design. Students will also participate in group projects to design, implement, and evaluate user interfaces. In addition, the common principles from HCI will directly applied to videoagmes, to evaluate and design properly games and guarantee accesibility to everyone.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G01	Ability to use learning strategies independently for use in the continuous improvement of professional practice.
	G02	Ability to analyse and synthesise problems of their professional activity and apply in similar environments.
	G04	Ability to critically think about information, data and lines of action and their implementation in relevant social, scientific ethical issues.
	G05	Ability to communicate in Spanish and English for professional issues in oral and written form.
	G10	Ability to master information and communication technologies and their application in their professional field.
Specific programme competences	E13	Ability to discover, design and assess the main foundations and techniques of player-computer interaction that guarantee the accessibility and usability of the systems, services and IT applications including video games.
	E18	Ability to understand and apply the principles of ergonomy and
	E30	Ability to design, develop, select and evaluate applications and systems, ensuring reliability, safety and quality, according to ethical principles and legislation and regulations.
Learning outcomes	R01	Learn the fundamental principles of user interfaces.
	R02	Design and evaluate human-computer interfaces that guarantee access to systems, services and applications.
	R03	Design and evaluate interfaces in the field of video games.
	R04	Know about the principles of user-centred design to ensure the usability and accessibility of applications, paying special attention to the development of video games and interactive applications

PRE-REQUISITES:

This course will be delivered in English. Academic reading and writing skills are expected from students.

SUBJECT PROGRAMME:

Subject contents:

1 - Bloque I - UX
1.1 - Introduction
1.2 - HCI foundations
1.3 - Interaction design
1.4 - Universal design
2 - Bloque II - Game Design
2.1 - Game Design Overview
2.2 - Game
2.3 - Player
2.4 - Experience
2.5 - Game Design Process
2.6 - Game Mechanics
2.7 - Playtesting
2.8 - Game Balancing

Subject planning could be modified due unforeseen circumstances (group performance, availability of resources, changes to academic calendar etc.) and should not, therefore, be considered to be definitive.

TEACHING AND LEARNING METHODOLOGIES AND ACTIVITIES:

Teaching and learning methodologies and activities applied:

Theoretical-practical sessions:

First, the lecturer will present the theoretical contents of the subject as a master class, supported by the necessary resources (blackboard, slides ...) to exemplify and illustrate the contents properly. The participation of students asking questions, theoretical situations or promoting group discussion on the topics discussed will be encouraged. Then, the theoretical sessions will be supported by the approach and resolution of practical exercises.

These exercises will be solved by the students, individually or collectively, depending on the type of problem to solve. As part of this practical session, students will present their proposed solutions.

The participation of students during these sessions will be valued positively.

Individual assignments:

Part of the learning and the grade acquired through the course comes from the resolution of the individual assignments proposed along the course. In particular, for each of the lectures a short assignment will be requested. Those assignments must be delivered through the PDU within the deadline.

In order to resolve the exercises, student will receive some technical guidance. In addition, a communication mechanism will be provided (PDU) to discuss and comment on the different problems that arise during the resolution of the assignments.

The resolution of these individual assignments prepares the student to acquire the professional competences of this course.

Group assignments:

In addition to the individual assignments, students will develop a group assignment that will put in practice all the topics covered by the course. This assignment will be followed by the teacher before the final presentation, to ensure the quality and guide the students when needed.

As with the individual assignments, there will be technical guidance and a communication mechanism to discuss about the assignments.

Presentation of the assignments:

An important part of the learning process for the student is the presentation of their assignments to the rest of the students. During these presentations, students will have the opportunity to highlight the most positive aspects of their work, present the solutions to address the issues and even discuss other ways of solving the problems explored by the student.

Mentoring and participation in the PDU:

Students will attend tutorials to ask the teacher questions and problems that arise during the course and that have not been properly addressed during the sessions. Also during these tutorials, the teacher will provide supervision and guidance to help students acquire the skills raised by the course.

As during tutorials with the teacher, students can use the media available on the PDU to raise concerns or judgments about the course at any time, to receive help and feedback from other students and from the teacher.

The tutorials will be on demand, arranged through e-mail at convenient times for students and the teacher.

Service Learning:

Service-learning is an educational approach that balances formal instruction and direction with the opportunity to serve in the community in order to provide a pragmatic, progressive learning experience. Service-Learning must properly connect the traditional classroom experience with the real life lessons that come through service.

Service-learning offers students immediate opportunities to apply classroom learning to support or enhance the work of local agencies that often exist to effect positive change in the community. The National Youth Leadership Council defines service learning as "a philosophy, pedagogy, and model for community development that is used as an instructional strategy to meet learning goals and/ or content standards."

"Service-learning is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities for reflection designed to achieve desired learning outcomes."

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	23
	Practical exercises	8
	Practical work, exercises, problem-solving etc.	8
	Debates	5
	Coursework presentations	4
	Laboratory practice	13
	Assessment activities	4
Individual study	Tutorials	6
	Individual study	18
	Individual coursework preparation	15
	Group coursework preparation	10
	Project work	35
	Recommended reading	1
Total hours:		150

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	20 %
Individual coursework:	25 %
Group coursework:	30 %
Final exam:	15 %
Attendance and active participation:	10 %
TOTAL	100 %

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al inicio de la materia.

BIBLIOGRAPHY AND DOCUMENTATION:

Basic bibliography:

A. Dix, J. Finlay, G. Abowd and R. Beale. Human Computer Interaction, Third edition, Prentice Hall, 2003.
Jesse Schell, The Art of Game Design Second Edition, Morgan Kaufmann, 2014

Recommended bibliography:

J. Preece, Y. Rogers, H. Sharp, D. Benion, S. Holand, T. Carey, Human Computer Interaction, Addison Wesley, 1994.
Sharp H., Rogers Y., Preece J., Interaction design: beyond human-computer interaction, Wiley, 2007

Recommended websites:

Human Computer Interaction	http://www.zainbooks.com/books/computer-sciences/human-computer-interaction.html
HCI bibliography	http://hcibib.org/
Human Computer Interaction	http://www.hcibook.com/e3/