

BASIC DETAILS:

Subject:	DISEÑO DE PERSONAJES Y ANIMACIÓN		
Id.:	31374		
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:	66	Individual study:	84
Main teaching language:	Inglés	Secondary teaching language:	Castellano
Lecturer:	LOPEZ ZARAGOZA, MOISES (T)	Email:	mlopezz@usj.es

PRESENTATION:

Acquire the knowledge needed to make significant and good character designs, animations and important aesthetic decisions, as part of a group and as an individual. Objectively evaluate different ambit content, detect mistakes and solve them. Obtain the basic tools to be capable of feeling comfortable and confident in a professional scenario, whilst developing the professional skills necessary to be able to work as a part of a dynamic and healthy team.

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.
	G07	Ability to handle different complex knowledge models through a process of abstraction and its application to approach and solve problems.
	G10	Ability to master information and communication technologies and their application in their professional field.
Specific programme competences	E21	Ability to execute the art of video games, create characters and settings.
	E25	Ability to design and create graphical elements and their application in the development of video games.
	E26	Ability to perform the design and creation of animated characters and their application in the development of video games.
Learning outcomes	R01	Learn the principles of creating characters.
	R02	Use applications of character modelling and animation in the context of video games.
	R03	Know how to define character skeletons and use them to control their movement
	R04	Learn the techniques of motion capture.
	R05	Know about the basics of inverse kinematics and its application to animation.
	R06	Discover the special animation techniques such as face, hair and fabric elements.
	R07	Learn how to make textured characters

PRE-REQUISITES:

Pasion and interest for videogames, their art, design, aesthetics and overall artistic development. Appreciate the relationship between narrative and artistic design, as well as charisma and the characters looks. Creativity and imagination.

SUBJECT PROGRAMME:

Subject contents:

1 - INTRODUCTION: CHARACTER DESIGN AND ANIMATION

1.1 - Why is so important aesthetics and character design in video games?
1.2 - First approach to students taste and abilities
2 - CHARACTER DESIGN: 2D PHASE
2.1 - Archetypes and Estereotypes
2.2 - Creativity Estimulation
2.3 - Character design as a team work
2.4 - Workflows, preproduction and deadlines
2.5 - Character personality
2.6 - Identification and characteristics of basic geometry
2.7 - Artistic style
2.8 - Sketching and thumbnailing
2.9 - Character proportions and anatomy
2.10 - Traits, personality and how to transfer them
2.11 - Color palette
2.12 - 2D to 3D translation
3 - CHARACTER DESIGN: 3D PHASE
3.1 - 3D modeling: Concepts and creative 3D pipeline
3.2 - 3D modeling: Getting to know the program
3.3 - 3D modeling: Basic modeling tools
3.4 - 3D modeling: Basic modeling notions
3.5 - 3D modeling: Topology
3.6 - 3D modeling: Textures, materials and UVs
3.7 - 3D modeling: Light types and lighting tecniques
3.8 - 3D modeling: Render and final tocuhes
3.9 - Animation: Animation tools
3.10 - Animation: Creations and edition of animations, time lines, timing and keyframes
3.11 - Animation: Rigging
3.12 - Animation: Cameras and interpolation
3.13 - Animation: Exportation and rendering

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:

Theory session

This kind of session will happen more often at the beginning of the subject, when we present new programs, content or concepts. These classes will be really dynamic and open minded, with a view to increasing student engagement via debates and TIC presentations. During these kind of classes, the students could ask all kind of questions, which can be answered to improve the students wider knowledge of the subject.

Practice session

Character design and animation are two very creative and practical activities, and therefore require a lot of time to complete the process. From the creative process of considering initial ideas all the way through to working on the designs. During class time, we will work through the different exercises and projects that will be shown throughout the course lifetime, this way, the student can be guided in the process, and problem solving is much more meaningful and easier. Class presentation will be a common practice for students to show their created content and defend it, their objectives, as well as the creative process, decisions, etc. This way, all the mistakes and doubts are exposed and the class learns as a whole, in a collective way. Also, this is great experience of a professional group working methodology, as a creative team, which will help students when they enter the workplace.

Tutorial sessions

Tutorial hours will be mainly focused on problem and doubt solving, as well as providing a platform for students to seek general guidance.

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	18
	Other theory activities	2
	Practical exercises	6
	Practical work, exercises, problem-solving etc.	13
	Coursework presentations	4
	Films, videos, documentaries etc.	1
	Workshops	2
	Laboratory practice	11
	Other practical activities	5
	Assessment activities	2
Individual study	Extra-curricular activities (visits, conferences, etc.)	2
	Tutorials	4
	Individual study	15
	Individual coursework preparation	16
	Group coursework preparation	10
	Project work	34
	Research work	3
	Portfolio	2
Total hours:		150

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	25 %
Individual coursework:	45 %
Group coursework:	20 %
Final exam:	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:

Animación: - WILLIAMS, Richard. Animators survival kit. Faber and Faber, 2012 - WHITAKER, Harold HALAS, John. Timing for animation. Focal Press, 2009 - GOLDBERG, Eric. Character Animation Crash Course!. Silman-James Press, 2008 - GILBERT, Wayne. Simplified Drawing for Planning Animation. Anamie Entertainment Ltd, 2014

Recommended bibliography:

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Diseño de personajes: - CROSSLEY, Kevin. Character Design From the Ground Up. CRC Press, 2014 - BANCROFT, Tom. Creating Characters with personality. Watson-Guptill, 2006

Recommended websites: