Information about the subject

Degree: Degree in Design and Narration in Animation and Video games

Faculty: Faculty of Legal, Economic and Social Sciences

Code: 2050105 **Name:** Digital image processing

Credits: 6,00 **ECTS Year:** 1 **Semester:** 1

Module: GRAPHIC EXPRESSION AND DRAWING

Subject Matter: DIGITAL IMAGE **Type:** Compulsory

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

Module organization

GRAPHIC EXPRESSION AND DRAWING

Subject Matter	ECTS	Subject	ECTS	Year/semester
ARTISTIC EXPRESSION	18,00	Anatomical Drawing	6,00	1/2
		Concept Artist	6,00	2/1
		Fundamentals of Drawing and Graphic Expression	6,00	1/1
DIGITAL IMAGE	18,00	Digital image processing	6,00	1/1
		Digital Painting. Matte Painting	6,00	2/1
		Graphic user interface design GFX	6,00	1/2

Recommended knowledge

Basic use of the computer.

Prerequisites

It is necessary to have passed the subject Drawing and graphic expression foundations to be able to take this subject.

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1	The student shows a creative development work in the digital treatment of images.
R2	The student uses the digital treatment of images for the creation of existing or imaginary realities.
R3	The student acquires and uses specific vocabulary related to the subject.
R4	The student creates or retouches digital images for the creation of the design of the graphic interface.
R5	The student uses or retouches digital images as a resource for the development of imaginary realities through digital painting (Matte-Painting).

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
B2	Students to apply their knowledge to their job or vocation in a professional manner and to possess competences that are usually shown through the elaboration and defence of arguments and problem-solving within their area of study.				x

GENERAL		Weighting			
		1	2	3	4
G1	To develop original and innovative ideas and proposals in the area of design and narrative of animation and videogames in the required work in a project, combining conceptual and technical aspects.			x	
G3	To identify new trends in the field of animation and videogames and to incorporate them in their work.			x	
G5	To use a specific and inclusive vocabulary in the area of expertise of the degree.				x

SPECIFIC		Weighting			
		1	2	3	4
E9	To use drawing as a basic tool for the representation of actual or imaginary realities.	x			
E18	To create or retouch digital images.				x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	40,00%	Practical tests
	60,00%	Elaboration of projects

Observations

Student attendance and participation will count as 10% of the value of the projects.

MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M2   Participatory master class

M4   Problem solving activities

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Active listening, summaries, concept maps and/or notes organizing the information and work in small groups (Kagan structures) to process the received information. M2	R2, R3	10,00	0,40
Use of the learnt theory in simulated or real circumstances. M4	R1, R2, R4	50,00	2,00
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work. Study, memorization, test preparation, practical abilities drilling, elaboration of works, essays, reflections, metacognitions, portfolios elaboration, … M4	R1, R2, R3, R4	14,00	0,56
Use of the learnt theory in simulated or real circumstances. M4	R1, R2, R3, R4	76,00	3,04
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
01-Introduction to digital image retouching	History and evolution of digital image processing. What is Photoshop. Work philosophy, panels and windows.
02-Selection tools	What is selection in Photoshop and work philosophy. Fundamental selection tools, recommended use and parameters.
03-The light: Levels, adjustments, brightness and contrast.	Basic Photoshop tools to modify and enhance the light in digital images.
04-Repair and retouching tools	Tools to repair and clean a damaged or old image. Work philosophy. Combination or not with the selection tools.
05-Channels	What are the channels of a digital image. Location and use. Exposure of the different image modes and recommendations.
06-Layers	Working philosophy of Photoshop layers. Advantages and disadvantages. Types of layers and add-ons.
07-Image transformation	Deformation and modification of images. Basic tools: scale, rotate, skew and distort and special tools: scale according to content and free position scaling.
08-Layer mask.	What are layer masks: advantages, disadvantages and working philosophy.
09-Montage and mixing of images	Formal and creative retouching. Work philosophy and analysis of examples.
10-Panoramics: Photomerge and traditional method	How to stitch panoramas from Photoshop almost automatically.

11-Filters and Progressive Effects	Definition and application of the Filters. Typology of them. What are progressive effects and ways to achieve them.
12-Text: text layers, text mask.	Tool and typology of the Text tool in Adobe Photoshop.
13-Actions and Preset Tools	What are actions, how to use existing ones and how to create new ones. Downloading actions from the Internet.
14-Formats	Typology and recommendations on the use of different graphic formats.
15-Scanning, Importing and exporting documents.	Definition and application of the scanner. Procedures and recommendations in the export of graphic documents
16-Resolution	Definition, working philosophy and recommendations for use in digital images according to their final output.

Temporary organization of learning:

Block of content	Number of sessions	Hours
01-Introduction to digital image retouching	1,00	2,00
02-Selection tools	3,00	6,00
03-The light: Levels, adjustments, brightness and contrast.	1,00	2,00
04-Repair and retouching tools	4,00	8,00
05-Channels	1,00	2,00
06-Layers	4,00	8,00
07-Image transformation	1,00	2,00
08-Layer mask.	2,00	4,00
09-Montage and mixing of images	5,00	10,00
10-Panoramics: Photomerge and traditional method	1,00	2,00
11-Filters and Progressive Effects	2,00	4,00
12-Text: text layers, text mask.	1,00	2,00
13-Actions and Preset Tools	1,00	2,00
14-Formats	1,00	2,00

15-Scanning, Importing and exporting documents.	1,00	2,00
16-Resolution	1,00	2,00

References

Blue Vertigo. From:
http://www.bluevertigo.com.ar/

Smashing Magazine. From:
http://www.smashingmagazine.com/

Photoshop Tutorials. From:
https://www.photoshoptutorials.ws/

86 Best Photoshop Tutorials. From:
http://www.digitalartsonline.co.uk/features/illustration/86-best-photoshop-tutorials-updated/

Photoshop Tutorials. From:
https://helpx.adobe.com/photoshop/tutorials.html

85 Brilliants Photoshop Tutorials. From:
http://www.creativebloq.com/graphic-design-tips/photoshop-tutorials-1232677

Photoshop Cafe Tutorials. From:
http://photoshopcafe.com/tutorials.htm

Photoshop Efectos. From:
https://www.youtube.com/watch?v=K0PFaN3Z5Ws

Fs Stoppers, Photoshop. From:
https://fstoppers.com/photoshop/how-remove-fence-using-photoshop-582133

Tutoriales de Photoshop de Ildefonso Segura. From:
https://www.youtube.com/c/ildefonsosegura

Tripiyon: tutoriales de Photoshop. From:
https://www.youtube.com/c/Tripiyon

Tutoriales de Photoshop de Oscar Abad. From:
http://www.oscarabad.com/photoshop-y-los-27-modos-de-fusion-de-capa-la-guia-definitiva/

Tutoriales de Phtoshop de Graffica. From:
https://graffica.info/como-crear-pelo-en-photoshop/