



**DIGITAL ANIMATION
(3 ECTS)
MASTER IN TECHNOLOGICAL INNOVATION IN
EDUCATION**

Catholic Universtiy of Valencia



Course 2023/2024

TEACHING GUIDE

		ECTS
SUBJECT: DIGITAL ANIMATION		3
Area: Digital Content Design		15
Type of training ¹ : blended learning	COURSE: 1º Semester: 1º	
Professor: Luis Miguel García Planelles	Department: General Didactics, Theory of Education and Technological Innovation	
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MODULE ORGANISATION

Digital Content Design	15
Duration and temporal location within the curriculum: This module is located as a continuation of Module I which is the introductory module of the master and will be taught in the first semester. The module, of 15 ECTS credits, will begin on November and will last until January. It is the very first module of practical nature and consists of three subjects. The first one, <i>Digital Content Design</i> , aims to make the students become familiar with the different multimedia file formats and to introduce them to the different repositories used	

¹



to look for multimedia resources. Moreover, students are expected to be able to acquire strategies to organize and share these resources on different repositories of the web. Finally, the students will be taught some strategies and programs, not only in offline version but also on the web 2.0 in order to teach them how to create their own multimedia resources, images, sounds and videos.

Following on from the multimedia resources generation, the second subject of this module, **Digital Animation (to which this syllabus refers)**, enable the students to go further in the digital resources generation and to develop small digital animations as well as to acquire the necessary strategies to create vector animation by computer.

Finally, once the students are capable to generate resources, in the following area, **Digital Activities Generation**, students are expected to know the different repositories to look for activities and complete learning units and to generate activities by using resources of third parties, duly licensed, or by using their own resources. Moreover, the students are intended to know methodological strategies in order to make an efficient use of the digital contents that have been developed such as activities typology. Lastly, the students will be taught innovative didactic and methodological strategies for an efficient use of the educative contents in PDI, tablets and other emerging technologies.

Module and Subjects				
Module	ECTS	SUBJECT	ECTS	Course/ semester
Digital Content Design	15	Digital Content Design	6	1/1
		Digital animation	3	1/1
		Digital Activity Design	6	1/1

TEACHING GUIDE FOR THE SUBJECT: Digital Animation

OVERALL OBJECTIVES

- To understand digital animation as support resource for the teaching task.
- To introduce students to the different types and digital animation formats as well as some examples of use in the educational area.
- To learn to plan and design prior to the production of digital animations.

Teaching Guide



<ul style="list-style-type: none"> To design and produce simple digital animations. 				
BASIC AND GENERAL SKILLS		Assessment criteria		
	1	2	3	4
CB6 – To be creative and original in the development and/or application of ideas, sometimes in an investigation context.		x		
CB9. To have the ability to clearly and concisely communicate conclusions, underlying knowledge and reasons to a specialised and non-specialised audience.		x		
CB10. To have the ability to follow a self-study method.		x		
CG1. To have the ability to create digital materials adequate to the teaching-learning processes using ICT tools.			x	
CG2 – To have the ability to adapt to the new technological situations by analyzing contents and competences.		x		
CG3 – To have the ability to innovate their teaching methodology by integrating digital competence into the class.		x		
CG7 – To have the ability to generate, share and spread academic and professional knowledge.		x		

SPECIFIC SKILLS ²				
	1	2	3	4
CE6 – To have the ability to incorporate innovative methodological changes through the ICT tools.			x	
CE8 – To have the ability to promote interactive learning through the use of ICT tools.			x	
CE18 – To have the ability to handle applications and tools of the web 2.0 in order to create and edit multimedia resources in all formats (image, audio, animated gif, videos and interactive animations).				x
CE19 – To have the ability to conceptualize and produce an educative project of 2D animation by analyzing the script, designing the models, monitoring the creation of the storyboard and its disposition, and recording the audio file of the program.				x

² Follow correspondingly with the above numbering. Specific competences are weighted 1 to 4 following criterion with the cross.



LEARNING OUTCOMES ³	SKILLS
R1. The training activity is designed by the students once a needs analysis has been carried out in order to assess the applicability of the ICT on it.	CB9, CB10, CG2, CE8
R2. Students produce digital animations.	CB6, CB10, CG1, CE18
R3. Using different tools, students acquire the fundamental notions required to edit and develop graphic projects.	CB10, CG1, CG2, CG3, CG7, CE18, CE19

FACE-TO-FACE WORK TRAINING CLASSROOM ACTIVITIES			
ACTIVITY	Teaching-learning methodology	In relation with learning outcomes	ECTS ⁴
PARTICIPATIVE MASTER LECTURE	Exposition of contents on the part of the professor, analysis of competences, explication and demonstration of skills, abilities and knowledge in the classroom, which require feedback and student's participation.	All learning outcomes	0.06

³ Renumber the learning outcomes following the nomenclature proposed.

Important Note: The competencies are expressed in a generic sense of what is needed in the teaching guide learning outcomes. These results constitute a realization of one or more skills, making explicit the domain level or performance to be acquired by the student and the wording contained in the criterion which will be evaluated. Learning outcomes demonstrate what the student will be able to show the end of the course or subject and reflect also the degree of acquisition of competence or skill set.

⁴ Subject or matter is organized in **ON-SITE WORK TRAINING ACTIVITIES** and in **AUTONOMOUS WORK TRAINING ACTIVITIES**, with a percentage estimated at ECTS. A suitable distribution is as follows: 35-40% for the Presential formative activities and 65 - 60% for the autonomous work. (For a course of 6 ECTS: 2.4 and 3.6 respectively).

Teaching and learning methodology is described in this guide in a generic way, specifying in the teaching units of each subject or matter.

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PRACTICAL CLASSES	Group work in groups session supervised by the professor. Study of cases, problems, field study, data research, diagnostic analysis, etc. Significant construction of knowledge on the interaction and activity of the student.	All learning outcomes	0.39
OFFICE HOURS	Face-to-face personal attention, individually or in small groups. An instruction or guidance period is carried out by a tutor in order to revise and discuss the content of a lesson.	All learning outcomes	0.06
IN CLASS ASSESSMENT	SET OF oral and / or written, presentations and / or oral presentations used in the formative or initial training	All learning outcomes	0.06
ONLINE OFFICE HOURS	Virtual and individual personalised attention through the virtual campus (https://campusvirtual.ucv.es). An instruction or guidance period is carried out by a professor in order to revise and discuss the content of a lesson, help the student with the continuous evaluation activities, etc.	All learning outcomes	0.06
VIDEO CONFERENCE	Formative session through video conference, integrated in the virtual campus. It involves participation and/or exposition in real time.	All learning outcomes	0.06
PROJECT	Practical work supervised by a professor in order to produce a final project where various objectives, previously set, are meant to be reached by the students. The project includes a set of interrelated activities for the achievement of the objectives. It implies the application of knowledge, skills, tools and techniques previously learned in order to satisfy the development of the project.	All learning outcomes	0.3
Total			0.99



AUTONOMOUS WORK TRAINING ACTIVITIES OF THE STUDENT			
ACTIVITY	Learning-teaching methodology	In relation with learning outcomes	ECTS
INDIVIDUAL WORK	Study of the student: Individual preparation (or in groups) of readings, tests, resolution of problems, seminars, works, memories, conceptual maps, etc. in order to expose or to give in the theoretical classes, practical exercises and/or positions of a guardian of small group. Work made in the platform of the university (www.plataforma.ucv.es)	All learning outcomes	1.35
ASYNCHRONOUS VIRTUAL SESSION	Exhibition contents Professor, analysis skills, explanation and demonstration of skills, abilities and knowledge in the classroom, which require feed-back and student participation.	All learning outcomes	0.36
CONTINUOUS ASSESSMENT ACTIVITIES	Comments, book summaries, critical analysis, writing texts, glossaries, webquest and other activities that are designed to be done individually or in teams, to evaluate the acquisition of learning outcomes from different subjects using the e-learning VCU platform.	All learning outcomes	0.3
Total			2.01



EVALUATION SYSTEM FOR THE ACQUISITION OF SKILLS AND GRADING SYSTEM		
Assessment tool⁵	ASSESSED LEARNING OUTCOMES	Percentage
Individual monitoring of the active participation in face-to-face and virtual lessons, seminars and tutoring.	ALL	10%
Performing tasks and practical work	ALL	40%
Final Project	ALL	50%

CRITERIA FOR THE GRANTING OF DISTINCTION:

According to the general rules you can only give honours to 20 students per fraction rather than 20, with the exception of groups of fewer than 20 students in total, which can provide tuition. Distinction is awarded to a student who has obtained outstanding grades and has stood out for its active participation in class, attendance at tutorials, presentation and preparation of work and engagement on the subject.

DESCRIPTION OF CONTENTS	SKILLS
DIGITAL ANIMATION: Generation and advanced edition of interactive and multimedia animations. Computer vector animation: transformation and modification of drawings, animation and timeline, to work with movie clips using scenes and buttons for interactivity.	
Digital animation	CB6, CG2, CE8

⁵ Assessment techniques and tools: oral exam-exposition, written tests (multiple choice tests, development tests, conceptual maps, etc.), supervised projects, projects, case studies, observation notebooks, portfolio, etc.



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Types of digital animation	CE8
The Story Board concept	CG1, CB6, CE8, CE18
Digital animation creation <ul style="list-style-type: none"> a. Animated gif b. Stopmotion techniques. Creation of multimedia projects with this technique c. Introduction to machine language for the creation of animations and simple videogames 	CB6, CB9, CB10, CG1, CG2, CG3, CG7, CE8, CE18, CE19

BIBLIOGRAPHY

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Barry Purves. (2011) Blume Animación. Stop Motion. Ed. Blume (Naturart)

Cruz, E. L., & López, J. C. R. (2017). Propuesta de animación en un aula de Educación Primaria: stop-motion Animation proposal for a Primary Education class: stop-motion.

Hart, J. P. (2008). *Art of the Storyboard*. Elsevier Science & Technology.

Kenneth Priebe y Ken A. Priebe. (2010) The Advanced Art of Stop-Motion Animation. Ed. Course Technology.

Marsh, J. (2006). Digital animation in the early years: ICT and media education. *ICT in the early years*, 123-135.

Mejía, Y. F. O., Pérez, M. A. G., Ramírez, I. V. R., & Duran, M. A. O. (2023). La animación como herramienta para la comprensión lectora en niños durante la pandemia del COVID-19. *Revista del Centro de Investigación de la Universidad la Salle*, 15(59), 167-192.

Melvyn Ternan. (2014) Animación Stop Motion. Ed. Promopress.

Pastrana Bravo, C. R. (2022). Animación digital sobre cuento infantil y la comprensión lectora en estudiantes de 4to grado de primaria, Los Olivos, 2022.

Pavlou, V. (2020). Art technology integration: digital storytelling as a transformative pedagogy in primary education. *International Journal of Art & Design Education*, 39(1), 195-210.

Peter Lord y Brian Sibley. (2010) Cracking Animation: The Aardman Book of 3-D. Ed. Thames and Hudson LTD

Quiroz Ponce, K. M. (2020). *La animación digital como apoyo didáctico cultural para niños de 5º grado de Educación Básica de la Unidad Educativa "Alfonso Quiñonez George" de la ciudad de Esmeraldas* (Doctoral dissertation, Ecuador-PUCESE-Escuela de Diseño Gráfico).

Richard E. Williams. (2009) The Animator's Survival Kit. Ed. Faber & Faber



Susannah Shaw. (2008) Stop Motion: Craft Skills for Model Animation. Ed. Focal Press.

Wells, P., & Percy, M. A. (2007). Fundamentos de la animación. Parramón.

WEB SITES OF INTEREST

- <http://www.aardman.com/>
- <http://www.animateclay.com/>
- <http://brickfilms.com/>
- <http://www.smashingmagazine.com/2008/12/31/50-incredible-stop-motion-videos/>
- <http://scratch.mit.edu/>



Addendum to the Course Guide of the Subject

MÁSTER UNIVERSITARIO EN INNOVACIÓN TECNOLÓGICA EN EDUCACIÓN

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject:

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching.



Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen onsite activities described in this section of the Course Guide, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams



Explanation about the practical sessions:

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

- ☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.
- ☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated Percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:

ONLINE WORK



Regarding the Assessment Tools:

- ☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.
- ☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated Percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.