TEACHING GUIDE
PROGRAMMING OF INTERACTIVE
PROJECTS / WEB

Multimedia and Digital Arts
Universidad Católica de Valencia

Course 2025/25

GUÍA DOCENTE DE LA MATERIA Y/O ASIGNATURA

	ECTS
SUBJECT: Development of interactive / web projects I	6
Subject: Web Design	18
Module: Web Design and Multimedia	30

Type of Training[1]: Basic	**COURSE**: 3rd **Semester**: 2nd
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ORGANIZATION OF THE MODULE

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WEB DESIGN AND MULTIMEDIA				**30 ECTS**	
Duration and temporal location within the curriculum:					
Subjects and Courses					
Subject	**ECTS**			**ECTS**	**Course / semester**
Web Design	18	Design and Conceptualization Web Project / Interactive		6	2nd / 1st
		Web Development Projects / Interactive I		6	3rd / 1st
		Development of Web / Interactive Projects II		6	3rd / 2nd
Web Programming	6	Programming of Web / Interactive Projects		6	3rd / 2nd
Virtual Environments	6	New Languages and Digital Media		6	4th / 1st

COURSE GUIDE SUBJECT / SUBJECT:

Prerequisites: I don't know have established.

GENERAL OBJECTIVES

1. Mastering the technical languages of layout and design of web projects.

2. Being able to design and execute the user interface and interactivity of dynamic web projects.

3. Being able to analyze technologies and market trends to find the appropriate responses to the demands and resources of a specific context.

4. Establish the structures and behaviors to turn a design into a web project.

5. Develop and direct web projects, both in the analytical part and in the design and maintenance.

BASIC COMPETENCES

	1	2	3	4
CB1 That students have demonstrated that they possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks , also includes some aspects that involve knowledge from the forefront of their field of study		x		
CB2 That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and problem solving within their study area				x
CB3 That students have the ability to gather and interpret relevant data (usually within their study area) to make judgments that include a reflection on relevant issues of a social, scientific nature o ethics		x		
CB4 That students can transmit information, ideas, problems and solutions to a highly specialized audience or as non-specialized			x	

CB5 That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.				x

GENERAL COMPETENCES	Weighting of competence			
	1	2	3	4
1. Capacity for analysis and synthesis.			x	
2. Capacity for organization and planning.		x		
_ 5. Computer skills related to the field of study.				x
6. Information management capacity. Know how to obtain information effectively from books and specialized magazines, and other documentation.				
10. Teamwork.			X	
11. I work in an interdisciplinary team.				x
18. Independent learning and motivation for training throughout your professional life				
19. Adaptation to new situations			X	
22. Ability to collaborate with other professions and especially with professionals from other fields. Identify the appropriate professionals to adequately develop creative work. _			x	

SPECIFIC COMPETENCES				
	1	2	3	4
E9. Ability to plan and direct projects and developments of technological content, in particular related to art, multimedia design and communication			X	
E10 Ability to translate creative ideas so that it is possible to transmit them in digital format		X		
E17 Understanding of the characteristics of the sector of digital production and its operation and trends that mark its current and future evolution			x	
E18. Know, assess and understand the deontological obligations of the multimedia creation professional and the implications of adjusting to them in professional performance.				

LEARNING OUTCOMES [4]	COMPETENCES
R-1 Use of languages, technologies and web tools.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18,
R-2 Audience and experience analysis of the user.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18,
R-3 Skill in identifying technical needs the client's.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18,
R-4 Knowledge of digital techniques for the interface design and interactive navigation.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18,
R-5 Mastery of programming techniques necessary for the interactive project.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **EC:**9,10,17, 18,
R-6. Ability to incorporate digital materials to the project, such as: image, audio, video, VR panoramic.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18,
R-7 Installation of the project in the corresponding servers.	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **EC:**9,10,17, 18,
R-8. Maintenance, updating and positioning techniques of the web project	**CB:** 1,2,3,4,5 **CG:**1,2, 5, 6, 10,11, 18, 19, 22, **CE:**9,10,17, 18 ,

[4] Correlatively list the learning outcomes following the proposed nomenclature.

Important note: The competences are expressed in a generic sense, so it is necessary to include the learning results in the teaching guide. These results constitute a specification of one or more competencies, making explicit the degree of mastery or performance that the student must acquire and contain in their formulation the criteria

with which they will be evaluated. The learning results show what the student will be able to demonstrate at the end of the subject or subject and also reflect the degree of acquisition of the competence or set of competencies.

WORK TRAINING ACTIVITIES			
ACTIVITY	**Teaching-Learning MethodologyLearning**	**Relationship withResults of the subject**	**ECTS** [5]
PRESENTIAL CLASS Presentation	of contents by the teacher, analysis of competences, explanation and demonstration of abilities , skills and knowledge in the classroom.	R1, R2, R3, R4, R5, R6	1
PRACTICAL CLASSES	Group work sessions supervised by the teacher. Case studies, diagnostic analysis, problems, field study, computer room, visits, data search, libraries, network, Internet, etc. Meaningful construction of knowledge through the interaction and activity of the student.	R1, R2, R4, R5, R6	1
GROUP WORK EXHIBITION	Application of interdisciplinary knowledge	R1, R2, R3, R4, R5, R6	0.15
TUTORING	Personalized and small group attention. Period of instruction and / or orientation carried out by a tutor in order to review and discuss the materials and topics presented in the classes, seminars,	R3	0.1

[5] The subject and / or subject is organized in **TRAINING ACTIVITIES OF PRESENTIAL WORK** and in **TRAINING ACTIVITIES OF SELF-EMPLOYED STUDENT WORK,** with an estimated percentage in ECTS. An **adequate distribution** is as follows: **35-40%** for Face-to-Face Training Activities and **65-60%** for Self-Employment. (For a 6 ECTS subject: 2.4 and 3.6 respectively).

The teaching-learning methodology is described in this guide in a generic way, being specified in the didactic units in which the subject and / or subject are organized

	readings, completion of work, etc.		
EVALUATION	Set of oral and / or written tests used in the initial, formative or additive evaluation of the student.	R1, R2, R4, R5, R6	0.15
		Total	(2.4 *)

TRAINING ACTIVITIES OF STUDENT AUTONOMOUS WORK			
ACTIVITY	**Teaching-Learning Methodology**	**Relationship with Learning Results of the subject**	**ECTS**
WORK IN GROUP	Preparation in group of readings, essays, problem solving, seminars, papers, reports, etc. To expose or deliver in the theoretical classes, practical classes and / or small group tutorials. Work done on the university platform (www.plataforma.ucv.es)	R1, R2, R3, R4, R5, R6	1
SELF-EMPLOYEDSTUDY	STUDENT: Individual preparation of readings, essays, problem solving, seminars, assignments, memories, etc. To expose or deliver in the theoretical classes, practical classes and / or small group tutorials. Work carried out on the university platform (www.plataforma.ucv.es)	R1, R2, R4, R5, R6	2.6

Total	(3.6 *)

ACQUISITION EVALUATION SYSTEM ON THE COMPETENCES AND GRADING SYSTEM		
Assessment instrument[6]	**EVALUATED LEARNING OUTCOMES**	**Percentage awarded**
Written tests. (It will be essential to pass these tests to average the rest of the evaluation instruments)	R1, R2, R4, R5, R6	**50%**
Delivery of individual works. (It will be essential to deliver it on an agreed date and time to average the rest)	R1, R2, R4, R5, R6	**40%**
Active participation in class. (Presentiality, interventions in debates, practical sessions)	R1, R2, R3, R4, R5, R6	**10%**

ATTENDANCE
In accordance with the development guidelines of the General Regulations for the Evaluation and Qualification of Official Teachings and Own Degrees of the UCV, in face-to-face degrees, class attendance with a minimum of 80% of the sessions of each subject will be required as a requirement. to be evaluated. This means that, if a student does not attend the sessions of each subject, in a percentage greater than 20%, he/she will not be able to be evaluated, neither in the first nor in the second call, unless the person responsible for the subject, with the approval of the person responsible for degree, in view of duly justified exceptional circumstances, exempt from the minimum attendance percentage.
The same criterion will be applicable for hybrid or virtual degrees in which teachers must maintain the same percentage in the requirement of "presence" in the different training activities, if any, even if these are carried out in virtual environments.

CRITERIA FOR THE GRANTING OF HONOR REGISTRATION:
The mention of "Honors" may be awarded to students who have obtained a grade equal to or greater than 9.0. Their number may not exceed five percent of the students enrolled in a group in the corresponding academic year, unless the number of students enrolled is lower.

SINGLE EVALUATION
According to article 9 of the General Regulations for the Evaluation and Qualification of Official Teachings and Own Degrees of the UCV, the continuous evaluation system is the preferred evaluation system at the UCV. The art. 10 allows, however, for those students who in a justified and accredited manner express their inability to attend in person (or to synchronous communication activities for virtual and/or hybrid teaching modalities), their evaluation on an extraordinary basis in the so-called single evaluation. Said single evaluation must be requested within the first month of each semester to the Dean of Faculty through the Vice-Deaneries or Master's Directorates, with the express decision on the admission of said request from the student concerned being the responsibility of the latter.
The evidence to be presented and/or the test/s to be carried out in the single evaluation by the student that are established are: Completion of theoretical-practical activities 60% and Final exam 40%.

DESCRIPTION OF CONTENTS	COMPETENCES
BLOCK I - General concepts and contextual framework	4, 5, 9, 12, 18, 22, E9, E13, E17
1. - Contextual framework of a dynamic website 2.- Hosting and domains 3.- Local installation of a web hosting	
BLOCK II - Dynamic websites and content managers	1, 2, 4, 5, 6, 7,9, 10, 11 , 12,14, 15, 18, 19, 20, 22, 25, 26, E8, E9, E10, E13, E16, E17, E18
4.- Installation of Wordpress and analysis of characteristics 5.- Wordpress: content elements 6.- Wordpress: comment system and user system 7.- Wordpress: menus and widgets 8.- Wordpress: Themes, appearance control 9.- Wordpress: Plugins, functionality control 11.- Wordpress: insert multimedia content	

	TEMPORARY LEARNING ORGANIZATION (First enrollment students):	
	CONTENT BLOCK / DIDACTIC UNIT	**NUMBER OF SESSIONS**
1	Contextual framework of a dynamic website	**1**
2	Hosting and domains	**1**
3	Instalació n local web hosting	**1**
4	Installing Wordpress and analysis of features	**6**
5	Wordpress: content elements	**6**

7	Wordpress: menus and widgets	**2**
8	Wordpress: Themes, appearance control	**2**
9	Wordpress: Plugins, functionality control	**4**
10	Positioning techniques and search engine optimization	**3**
11	Wordpress: inserting multimedia content	**3**

BIBLIOGRAPHY

GENERAL

TIM BERNERS-LEE, MARK FISCHETTI: *"Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by its Inventor"*.Paw Prints, 2008.

PHP

TIMOTHY BORONCZYK, MARTIN E. PSINAS: "*PHP and MySql*". Anaya Multimedia / Wrox. January 2009. ISBN: 978-84-415-2516-0

DAVID SKLAR: "*Introduction to PHP 5*". Anaya Multimedia / O'reilly. January 2005. ISBN: 97884- 415-1803-2

LUKE WELLING, LAURA THOMSON: "*Web development with PHP and MySql*". Anaya / Programming. April 2009. ISBN: 978-84-415-2553-5

http://www.php.net

ADDITIONAL INFORMATION:

OF THE SUBJECT IN SECOND AND SUBSEQUENT ENROLLMENTS:

There will be a specific group for students who are not first enrollment and a teacher in charge of said group.

In this group there will be a number established by the UCV of monitoring and tutoring sessions (6 of 2 hours each) in which the work on the competencies that the students of the group need to acquire to pass the course will be reinforced.

These sessions are included in the attached schedule in this guide and are detailed in the description of the Didactic Units of the subject.

TEMPORARY ORGANIZATION OF LEARNING (Second or subsequent enrollment students):		
	CONTENT BLOCK / TEACHING UNIT	**NUMBER OF SESSIONS (they must add up to 6)**
1	Norms for the delivery of practices related to units 10 and 11	**1**
2	Review of theoretical contents of units 2 , 3,4,5	**1**
3	Review of theoretical contents of units 6,7,8	**1**
4	Review of theoretical content of unit 9	**1**
5	Evaluation of units 2, 3, 4, 5, 6, 7, 8	**1**