DEGREE CURRICULUM

WEB AND INTERACTION

Coordination: PASCUAL ALMENARA, AFRA MARIA

Academic year 2023-24

WEB AND INTERACTION 2023-24

Subject's general information

<table>
<tr><td>Subject name</td><td>WEB AND INTERACTION</td></tr>
<tr><td>Code</td><td>102183</td></tr>
<tr><td>Semester</td><td>1st Q(SEMESTER) CONTINUED EVALUATION</td></tr>
<tr><td>Typology</td><td>
<table>
<tr><th>Degree</th><th>Course</th><th>Character</th><th>Modality</th></tr>
<tr><td>Bachelor's Degree in Digital Design and Creative Tehcnologies</td><td>2</td><td>COMPULSORY</td><td>Attendance-based</td></tr>
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</td></tr>
<tr><td>Course number of credits (ECTS)</td><td>6</td></tr>
<tr><td>Type of activity, credits, and groups</td><td>
<table>
<tr><th>Activity type</th><td>PRALAB</td><td>TEORIA</td></tr>
<tr><th>Number of credits</th><td>3</td><td>3</td></tr>
<tr><th>Number of groups</th><td>2</td><td>1</td></tr>
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</td></tr>
<tr><td>Coordination</td><td>PASCUAL ALMENARA, AFRA MARIA</td></tr>
<tr><td>Department</td><td>COMPUTER ENGINEERING AND DIGITAL DESIGN</td></tr>
<tr><td>Teaching load distribution between lectures and independent student work</td><td>During the course master classes will be combined with the practical classes. In the first, the students will acquire the theoretical competences that will be applied later to practical classes.
The student will do the autonomous work in non-attendance hours.</td></tr>
<tr><td>Important information on data processing</td><td>Consult this link for more information.</td></tr>
<tr><td>Language</td><td>Spanish and catalan</td></tr>
<tr><td>Distribution of credits</td><td>1 credit is equivalent to 25 hours of student work
6 credits are 150 hours</td></tr>
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WEB AND INTERACTION 2023-24

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
PASCUAL ALMENARA, AFRA MARIA	afra.pascual@udl.cat	9	Send an email

Learning objectives

The objectives of the course are:

- Knowledge of web standards and web content.
- Ensure the correct application of rules and standards.
- Know the markup languages and the existing technologies to manipulate them.
- Design and application of products, services and multi-platform information systems.
- Design and application of user interaction mechanisms.
- Know how to use web analytics tools.

Competences

Basic and transversal competences:

- CB3. That students have the ability to collect and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature
- CT3. Acquire a significant proficiency in the use of the new technologies and in the Information and Communication Technologies. (ICT)

General competences:

- CG1. Skill to create and develop answers to problems of communication for the different digital contents.
- CG4. Apply the concepts and own methods of the digital technologies.
- CG5. Ability to design and evaluate systems that guarantee accessibility and usability.
- CG7. Capacity for analysis and development of digital technologies for the visualization of information.

Specific competences:

- CE8. Capacity for the creation and exploitation of virtual worlds, and for the creation, management and distribution of multimedia content.
- CE9. Know the methodologies, programs, techniques, standards and standards, and be able to use the knowledge base acquired with specific elements of web development.

Transversal Competences

- CT3. Acquire skills in the use of new technologies and information and communication technologies.
- TC6. Apply the gender perspective to the tasks inherent to the professional field.

Subject contents

T1. DYNAMIC WEB
1.1. Introduction and structure of dynamic web
1.2. Rules, standards and frameworks of dynamic web

T2. DESIGN IN DYNAMIC WEB
2.1. Design Responsive and basics templates
2.2. Web design techniques

2.3. Design framework concepts

T3. INTERACIONS IN DYNAMIC WEB
3.1. Frameworks concepts JS (I)
3.2. Frameworks concepts JS (II)

T4. DATA IN DYNAMIC WEB

4.1. General concepts
4.2. Structure of dynamic data
4.3. Access to dynamic data
4.4. Use of dynamic data
4.5. Analysing web data

Methodology

Students are expected to attend classes regularly, to do the exercises and to contribute with their answers, doubts, opinions, etc. to the development of the classes.

All students are expected to attend to 2 hours classes with the whole group and 2 hours with split group.

The sessions with split group will be carried out in the laboratory or by videoconference.

Whole group: Theory and Problems Classes (3 credits)

- Theoretical part: supported classes with digital information and/or with notes.
- Practical application part: work of application of concepts more practical.

Split groups: Laboratory Classes (3 credits)

- Conducted Classes and personalized monitoring for practical groups.

Development plan

Week	Description	**Activity GG Theory**	**Activity GM Practice**
1	T1. Dynamic web		Work tools configuration
2	T1. Dynamic web	Dynamic web. Introduction (1.1)	Web page structure (I)
3	T1. Dynamic web	Rules, standards and frameworks of dynamic web (1.2)	--
4	T2. Design in dynamic web	Responsive design and basic templates (2.1)	Responsive elements (I)
5	T2. Design in dynamic web	Web design techniques (2.2)	--
6	T3. Dynamic web interactions	CSS Framework Concepts (2.3)	Intrinsic design
7	T3. Dynamic web interactions	Framework JS (I) (3.1)	Frameworks (I)
8	T3. Dynamic web interactions	Framework JS (II) (3.2)	Frameworks (II)

9	Partial Exam		
10	T4. Data in dynamic web	General concepts (4.1)	Interactive components (I)
11	T4. Data in dynamic web	Structure of dynamic data (4.2)	Interactive components (II)
12	T4. Data in dynamic web	Access to dynamic data (4.3)	Interactive components (III)
13	T4. Data in dynamic web	Use of dynamic data (4.4)	--
14	T4. Data in dynamic web	Web data analysis (I) (4.5)	Usage and examples of data
15	T4. Data in dynamic web	Web data analysis (II) (4.5)	Usage and examples of data
16	Partial Exam		
17	Partial Exam		
18	Tutorships		
19	Resitting exam		

Evaluation

CONTINUOUS EVALUATION

Acronym	Type	Activities of Evaluation	Grade %	Minimum note	Compulsory	Recoverable
S1	IN	Guest session	10%	No	Yes	No
Ex1	GR	Exam1	30%	5	Yes	Yes
Pr1	IN	Practice1	15%	No	Yes	No
Ex2	GR	Exam2	15%	No	Yes	No
Pr2	IN	Practice2	30%	4	Yes	Yes

IN: Individual - GR: Group

ALL activities, guest session, practice and exam are MANDATORY.

Minimum grade to pass the course FINAL NOTE >= 5

In order to pass the course it is necessary:

- to obtain a minimum mark of 4 in the activities with a weight of 30%.

- to obtain a minimum mark of 5 in the partial exam 1.

The activities that are recovered do not get the same grade (they are penalized by 20%)

Activities submitted after the deadline will be subject to a 30% penalty.

FINAL_GRADE = 0,10*S1 + 0,30*Ex1 + 0,15*Pr1 + 0,15*Ex2 + 0,30*Pr2

In order to pass the course, the FINAL_GRADE must be greater than or equal to 5 and all the compulsory activities must be handed in.

ALTERNATIVE ASSESSMENT:

Where justified, an alternative assessment is possible.

Acronym	Type	Activities of Evaluation	Grade %	Minimum note	Compulsory	Recoverable
Pr1	GR	Practice1	20%	No	Yes	Yes
Pr2	GR	Practice2	35%	4	Yes	Yes
Ex	IN	Exam	45%	5	Yes	Yes

IN: Individual - GR: Group

Practicals and exams are MANDATORY.

Minimum mark to pass the course FINAL mark >= 5

Those who take the alternative assessment will take a complete assessment of the subject in a single exam in the period of part 2.

The compulsory practicals must be handed in before the final exam.

If the practicals and/or exam are not passed, it is possible to re-sit them, as well as to take a make-up exam, in the make-up week.

FINAL_GRADE = 0,20*Pr1 + 0,35*Pr2 + 0,45*Ex

In order to pass the course, the FINAL_GRADE must be greater than or equal to 5 and all the compulsory activities must be handed in and passed.

Bibliography

Webography

- https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web
- https://www.w3.org/
- https://www.w3schools.com/
- VUE. The ProgressiveJavaScript Framework https://vuejs.org

Bibliography

- **Mobile First.** *Luke Wroblewski*
- **Ressponsive Web Desing**. *Ethan Marcotte*
- **HTML5 for Web Designers.** *Jeremy Keith*
- **CSS3 for Web Designers .** *Dan Cederholm*
- **Adaptative Web Design.** *Aaron Gustafson*
- **Learning Web Design..** *Jennifer Niederst Robbins*