

Degree programme	Type	Course
Interactive Communication	OB	2

Contact lecturer

Name : Julian del Amo Montoya

Email : julian.delamo@uab.cat

Teaching staff

Roger Solis Gilabert

Maria Daniela Cordova Pintado

Group languages

You can consult this information at the [end](#) of the document.

Prerequisites

The course has no official prerequisites.

However, it is recommended that students have previously completed the following courses:

107737 - Introduction to Algorithms

107738 - Introduction to Programming

104738 - Introduction to Web Technology

as a basic understanding of structured programming, HTML, and CSS is required.

Objectives

The main objectives of the course are:

- To understand the technologies and dynamic programming languages used in web application development.

- To provide an overview of the main web development technologies used in server-side environments.
- To understand the technologies used for data storage access and data exchange in web application development.

Learning outcomes

- CM26 (Design basic and complex applications and websites that respect ethical principles and the gender perspective and are sensitive to society's demands and needs, considering the economic, regulatory, social and environmental context in which they are developed.) Design basic and complex applications and websites that respect ethical principles and the gender perspective and are sensitive to society's demands and needs, considering the economic, regulatory, social and environmental context in which they are developed.
- CM27 (Develop technically functional applications and webpages that are usable by all types of audiences and adapted to the characteristics of the organisation for which they are created.) Develop technically functional applications and webpages that are usable by all types of audiences and adapted to the characteristics of the organisation for which they are created.
- CM28 (Create and develop applications and webpages in the field of interactive communication autonomously with initiative and proactivity.) Create and develop applications and webpages in the field of interactive communication autonomously with initiative and proactivity.
- CM29 (Work as a team in the processes of coming up with, specifying and implementing applications and webpages in the field of interactive communication.) Work as a team in the processes of coming up with, specifying and implementing applications and webpages in the field of interactive communication.
- KM19 (Describe the role of web technology and identify the current most widely used web technologies from a conceptual and practical standpoint.) Describe the role of web technology and identify the current most widely used web technologies from a conceptual and practical standpoint.
- KM21 (Explain the appropriate methods, techniques, technologies and tools to develop web applications on local and virtual servers.) Explain the appropriate methods, techniques, technologies and tools to develop web applications on local and virtual servers.
- SM20 (Determine the current and most widely used web technologies and their application in interactive communication.) Determine the current and most widely used web technologies and their application in interactive communication.
- SM21 (Use structured and dynamic programming languages to create and develop applications and webpages in the field of interactive communication) Use structured and dynamic programming languages to create and develop applications and webpages in the field of interactive communication

Contents

- Programming in client-side and server-side environments.
- Dynamic generation of web pages.
- Server-side programming languages.
- Integration with web servers.
- Integration with markup languages.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Theory and problem-solving classes	30	1.2	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21
Laboratory sessions	66	2.64	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21
Personal study	104	4.16	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21
Laboratory practices preparation	72	2.88	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21

The course consists of a theoretical component, a practical component, and independent student work. It

includes a total of 96 contact hours. The overall student workload is 300 hours, of which 204 hours correspond to independent study. Throughout the course, the following learning activities will be carried out:

Theory and problem-solving sessions (30 hours)

These sessions provide students with the theoretical foundations of the course, as well as strategies to acquire, expand, and organize their knowledge. Active student participation will be encouraged, for example through discussions on topics that allow for different technological solutions.

Laboratory sessions (66 hours)

Laboratory sessions will focus on the development of a project related to the course contents. The project will be carried out in teams of two students. The sessions will be planned, documented, and prepared in advance by the instructor. Students are expected to prepare for each session beforehand by reviewing the relevant theoretical concepts and the fundamental technical aspects required for the development tasks.

A detailed schedule including the contents of each session will be presented on the first day of the course. It will also be available through the Virtual Campus, where students will find detailed descriptions of the exercises and laboratory assignments, teaching materials, and all the information required to successfully follow the course. If the teaching modality needs to be modified for health-related reasons, the instructor will inform students of any changes to the course schedule and teaching methodology.

During one of the course sessions, approximately 15 minutes will be allocated for students to complete the teaching evaluation and course evaluation surveys.

Note: Fifteen minutes of one class session, within the schedule established by the School or the degree program, will be reserved for students to complete the surveys evaluating the teaching performance and the course or module.

Annotation: within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Theory and problems classes	0.4	12	0.48	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21
Class attendance	0.1	4	0.16	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21
Laboratory sessions	0.5	12	0.48	CM26, CM27, CM28, CM29, KM19, KM21, SM20, SM21

The course includes the following assessment activities:

- Activity A (10% of the final grade): Attendance, participation, and engagement in the theory classes.
- Activity B (40% of the final grade): Individual assessment tests covering the theory and problem-solving sessions. This activity consists of four in-person examinations held throughout the semester to assess each student's individual level of achievement. Each examination covers the course content taught up to that point. Each test contributes 25% to the final grade for Activity B. To pass the course through continuous assessment, students must obtain a minimum average grade of 5.0 across all four tests.
- Activity C (50% of the final grade): Continuous assessment of the laboratory practical sessions through attendance and participation, together with the technical evaluation of the documentation submitted by the student at the end of each laboratory activity.

To pass the course, students must obtain a minimum grade of 5.0 in Activities A, B, and C.

Students are entitled to a resit assessment provided they have been assessed in activities whose combined weight represents at least two-thirds (2/3) of the final course grade. For Activity B, a resit examination (maximum grade: 5.0) will be offered to students who fail to achieve an average grade of 5.0 across the assessment tests. Due to the practical nature of the laboratory work, Activity C is not eligible for resit.

Students taking the course for a second enrolment may complete only the assessment tests. The final course grade will be the average grade obtained in these tests.

This course does not offer a single-assessment option.

If a student commits any academic misconduct that may significantly affect the grade awarded for an assessment activity, that activity will be graded 0, regardless of any disciplinary proceedings that may be initiated. If multiple cases of academic misconduct occur within the same course, the final course grade will be 0.

The use of Artificial Intelligence (AI) technologies is permitted only in the designated practical activities. Students must clearly identify any parts of their work generated with AI, specify the tools used, and include a critical reflection explaining how these tools influenced both the development process and the final outcome. Failure to disclose the use of AI in assessable activities will be considered a breach of academic integrity and may result in a partial or total reduction of the activity grade, or more severe disciplinary sanctions in serious cases.

Bibliography

<https://developer.mozilla.org/es/docs/Web/JavaScript>

<https://www.w3schools.com/js/>

Software

Visual Studio Code

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(TE) Theory	6	Catalan/Spanish	annual	afternoon
(PLAB) Practical laboratories	61	Catalan/Spanish	annual	afternoon
(PLAB) Practical laboratories	62	Catalan/Spanish	annual	afternoon
(PLAB) Practical laboratories	63	Catalan/Spanish	annual	afternoon