

Technologies and Systems of Production and Management of Digital Content

Code: 43964

Credits: 6

2026/2027

Degree programme	Type	Course
Journalism and Digital Content Innovation	OB	1

Contact lecturer

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Teaching staff

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Group languages

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

Prerequisites

The course requires knowledge -user level- of content editing systems in multimedia format

Objectives

The course responds to the need for the information professional to know the uses and possibilities that technology offers for the development of his daily work related to the management and production of digital content.

Digital content -and the technologies that facilitate its management- imply a technical, critical and practical knowledge on the part of the journalist/communicator based on two basic conditions: the identification of technological possibilities on the creation and management of information within a professional context (media, companies and institutions); and the ability to manage the flow of specific information from an innovative proposal and to take advantage of the available multiplatform tools and formats.

The main objective of the module is to provide the student with skills to be able to appreciate the technological environment that surrounds him and to introduce into his professional informative practice the possibilities that ICTs provide for his development as a journalist/communicator.

Learning outcomes

1. Take on different roles in an editorial team, contributing one's own knowledge.
2. Collaborate in a coordinated way in journalism production within a simulated news-generation environment.
3. Recognise the new profiles within the profession and how their roles in the news-reporting context are defined
4. Show the self-reliance and discipline needed to complete and present a master's dissertation.
5. Display the knowledge needed to formulate original ideas regarding the conception of a research project.
6. Identify and use the legal and regulatory mechanisms applicable to communication policies.
7. Integrate knowledge acquired when engaged in solving a research problem.
8. Put forward a research project that, using a relevant scientific method, can help to solve a particular problem related to journalism and digital communication.
9. Present the conclusions of a research project clearly in different formats and targeting a variety of audiences.
10. Propose and select applied evaluation methodologies on the use of information and communication technologies in producing and managing journalistic content.
11. Propose, on the basis of the content produced by the news company, different digital positioning strategies for this content.
12. Recognise the specific properties of users' digital news consumption in order to plan a digital-strategy action.
13. Recognise trends and dynamics of change in the communicative ecosystem in order to join in a real professional-development environment rapidly and efficiently.

Contents

1. Internet, AI, social media and technology
2. Massive data and the construction of critical technological frameworks.
3. Algorithms and databases
4. Management of digital content
5. Digital information coverage and hierarchies
6. Multiplatform management (transmedia)
7. Digital News Coverage and Informational Hierarchies
8. Display and content management tools
9. Visualization and Content Management Tools

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Study cases and exercises	39	1.56	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Readings and development of papers	75	3	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Mentorship	30	1.2	2, 3, 5, 7, 8, 10, 11, 12, 13
Classes	6	0.24	3, 6, 7, 10, 12, 13

The course will use different methodologies for the development of its contents. Mainly, it will focus on the study and resolution of practical-real cases of application and construction of knowledge. Likewise, some master sessions will be given and the students will be invited to carry out different works of practical application that aim to solve specific problems of the journalistic practice.

The calendar will be available on the first day of class. Students will find all information on the Virtual Campus: the description of the activities, teaching materials, and any necessary information for the proper follow-up of the subject. In case of a change of teaching modality for health reasons, teachers will make readjustments in the schedule and methodologies.

The content of this subject will be sensitive to aspects related to the gender perspective.

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
Development and monitoring of study cases	40%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Submission and presentation of works and exercises	50%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Assistance and active participation in class	10%	0	0	3, 5, 8, 9, 10, 11, 12, 13

The course will have a continuous evaluation with the following tracking methods:

1. Attendance and active participation in class (10%)
2. Submission and presentation of works and exercises (50%)
3. Development and follow-up of the proposed case studies (40%)

The students must pass all the components of the evaluation in order to obtain an approval grade of the subject.

Students will be entitled to the recovery of the subject if the set of activities has been evaluated, the weight of which must equal a minimum of 2/3 of the total grade of the subject. To be able to submit to the recovery of the subject, you will have to obtain the average grade of 3.5. The activities that are excluded from the recovery process are the development and monitoring of the cases of study raised and the assistance to the mentoring activities.

The main course work is not recoverable, case studies are.

This course does not provide for a single-assessment system.

Not assessable

When it is considered that the student has not been able to provide sufficient evidence of assessment, this subject must be graded as not assessable: failure to present the course work, failure to attend the preparation sessions for the course work and failure to carry out the case studies in the classroom.

Artificial Intelligence

For this course, the use of Artificial Intelligence (AI) technologies is permitted exclusively for Support tasks, such as bibliographic or information searches, and specific tasks carried out with the teacher's guidance

considered appropriate. Students must clearly identify any parts generated with these technologies, specify the tools used, and include a critical reflection on how AI has influenced the process and final outcome of the assignment. Failure to disclose the use of AI in this assessed activity will be considered a breach of academic integrity and may result in a partial or total penalty to the assignment grade, or more serious sanctions in severe cases.

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Software

As this is a completely practical course, the software required is the usual one for the journalistic tasks of content production in different formats.

Specifically, the following tools are required:

Text editing software: Word or similar

Image editing software: Canvas

Data analysis software: Excel or similar

Data visualisation software: Infogram - Datawrapper - CARTO

Multimedia editing software: Wordpress - Blogger - Wix

SNA Software: NodeXL

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
(TEm) Theory (master)	60	Spanish	first semester	morning-mixed